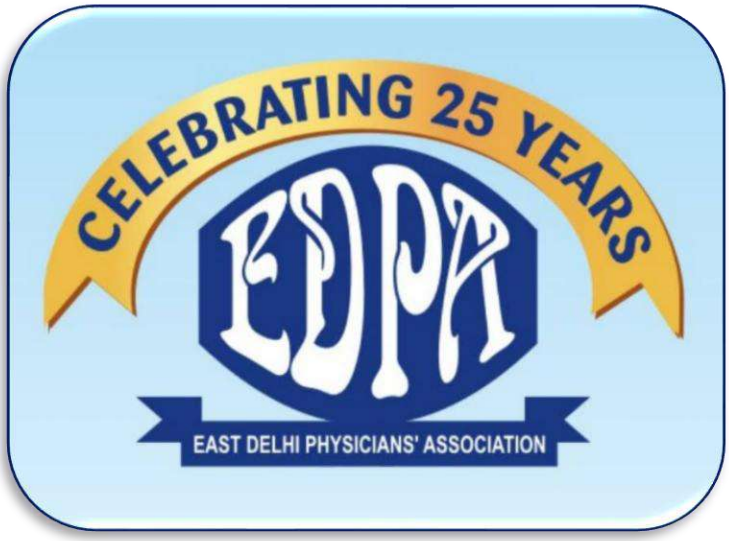
Issue: Jan- March 2025

EDPA QUARTERLY MEDICAL BULLETIN



DR RPS MAKKAR

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East Delhi Physicians' Association

EDPA QUARTERLY MEDICAL BULLETIN

SPECIAL 25TH ANNIVERSARY EDPACON 2024 COVERAGE

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Celebrating 25 Years of Excellence at EDPA

Dear EDPA Members,

The East Delhi Physicians Association (EDPA) marked its silver jubilee with a grand conference on December 22, 2024, at Hotel Le Méridien, New Delhi. The milestone event, ***EDPACON-2024****, was a grand success, bringing together over 300 physicians, including esteemed national speakers, guests of honor, special invitees, and Past Presidents of EDPA. The landmark event, reflecting on a quarter-century dedicated to medical advancement and professional unity, was a testament to EDPA's journey from its humble beginnings in 1995 to a robust community of over 400 physicians in 2024.*

The conference commenced with a warm welcome address by the current EDPA President, Dr Pankaj Chaudhary who highlighted the Association's journey since its inception in 1995-96. The inaugural session featured distinguished speakers who shared their insights on various medical advancements and practices.

The event started with the ***AP Jain Memorial Quiz for PG students*** *in the morning, with medical colleges from across Delhi and NCR participating in the engrossing quiz. This was followed by the daylong conference which included several high-quality scientific sessions covering a broad spectrum of topics pertinent to current medical practice. Eminent speakers delivered lectures on subjects such as:*

- ***Neurology Symposium on Acute stroke management***
- ***Advancements in the field Fatty Liver disease and IBD***
- ***Oration lecture on Internal Medicine and Rheumatology***
- ***Updates in Infectious Diseases , Post exposure prophylaxis and the trends in antimicrobial resistance***
- ***Heart Failure management with GDMT and Devices***
- ***Symposium on Diabetes , Obesity, Cardiometabolic syndrome , GLP1 RA, Insulins, and DPP4is***

These sessions provided valuable knowledge and fostered engaging discussions among the attendees.

A highlight of the event was the ***Felicitation And Honouring Of All Past Presidents Of EDPA****, acknowledging their contributions to the association's growth and success. Additionally, the prestigious*

Lifetime Achievement Award for 2024 was presented to a distinguished member for their exceptional service in the field of medicine.

*The conference concluded with a **Gala Dinner party and Entertainment**, where attendees enjoyed music, fine dining, and the opportunity to network and celebrate the association's achievements over the past 25 years.*

*We extend our heartfelt gratitude to the **Speakers and Faculty -** their expertise and insights were invaluable, enriching the conference and inspiring all attendees; **Organizing Committee -** their meticulous planning and dedication by the OC members ensured the event's seamless execution and success, and our dear **Attendees,** whose active participation and enthusiasm made this milestone celebration truly memorable.*

Looking ahead, as we celebrate our legacy, we at EDPA Executive committee are inspired to envision an even brighter future for EDPA. Together, we will continue to advance medical excellence and foster unity among healthcare professionals.

The association looks forward to continuing its commitment to medical excellence and professional development in the years to come. For more details about EDPA and upcoming events, please visit our official website:

https://www.youtube.com/watch?v=pGYh18zIb3c

Note: Summaries and key messages from each presentation are featured in this EDPA Medical Bulletin.

Warm regards,

Editorial Committee
East Delhi Physicians Association (EDPA)






Dr RPS Makkar, Editor;
Dr. P.N. Chaudhary, President EDPA;
Dr Vijay Arora, Chairman, Scientific Committee;
Dr Paras Gangwal, Immediate Past President;
Dr Anindya Biswas, Joint Editor

Scientific Program EDPACON 2024

Sessions:

I. **'AP Jain Memorial Quiz' - PG students**

II. **Neurology Symposium**

a. Medical Treatment with Thrombolysis: *Dr. M V Padma Srivastava*
b. Insights on Medical Thrombectomy in Stroke Management: *Dr. Vipul Gupta*
c. Panel Discussion: Management of Acute Ischemic Stroke: Moderated by *Dr. B K Gupta*; Panellists: *Dr. M V Padma Srivastava, Dr. Vipul Gupta, Dr. Awadh Pandit, Dr. Puneet Agarwal.*

III. **Gastroenterology symposium**

a. Fat in the Liver - Friend or Foe? *Dr. Anil Arora*
b. Paradigm Changes in Medical Rx of Inflammatory Bowel Disease: *Dr. Vineet Ahuja*

IV. **Infectious Diseases**

a. Post-Exposure Prophylaxis - Bites, Cuts, Nicks & Pricks: *Dr. Vikas Suri*
b. Panel Discussion: Reducing Infections in Hospitals, Nursing Homes, and Clinics: Panellists: *Dr. Vikas Suri, Dr. S Anuradha, Dr. Anupam Singh, Dr. Sarita Mohapatra*

V. **Inauguration Ceremony and Smt. Bela Devi Memorial Oration**:

a. Internal Medicine and Rheumatology - it takes two to tango! *Dr. Prof. Rohini Handa*

VI. **Medical Ethics And Medicolegal Session**

a. Legal Issues in Medical Practice, "Current Perspective": *Dr. Girish Tyagi/Dr Gaurav*

VII. **Obesity And The Role Of GLP/GIP RA**

a. Adiposopathy and the Medusa Paradox: *Dr. Vivek Bindal*
b. Tirzepatide: A Novel GIP+GLP1 Analogue: *Dr. Manoj Chawla*
c. SURMOUNT-ing Obesity with Tirzepatide : *Dr. Supratik Bhattacharya*
d. Panel Discussion: SURMOUNT-ing Obesity with Tirzepatide

VIII. **Cardiology**

a. Heart failure management - What after four pillars of GDMTs? *Dr. Upendra Kaul*
b. Panel Discussion: Advancing HF management: Bridging medical therapies with ICDs & CRT-D: Panellists: *Dr. Vivek Chaturvedi, Dr. Sandeep Singh, Dr. Amitabh Yaduvanshi.*

IX. **Diabetes And Cardiometabolic Syndrome**

a. Efficacy of DPP4i - A case-based approach: *Dr. Rajeev Chawla*
b. Hyperkalemia and the importance of RAASi optimization: *Dr. Vijay Kumar Sinha*
c. Case-based Discussion :HFrEF and treatment with ARNI: *Dr. Vishal Rastogi*
d. Early intervention with oral semaglutide: *Dr. Sanjay Kalra*
e. Path Breaking Innovation in Diabetes Rx - Degludec and IDegAsp: Dr. Pankaj Aneja

I. AK Jain Memorial Quiz for PG Medical students

Dr. Anil Kumar Jain Memorial Quiz: A Tribute Through Knowledge and Competition

The East Delhi Physicians Association (EDPA) had the honour of organizing a special academic event during EDPACON –*Dr. A.P. Jain Memorial Postgraduate Medical Quiz* – to pay tribute to one of our most respected members, the late **Dr. Anil Kumar Jain**. The event was not just a competition but a heartfelt homage to a visionary leader, a compassionate doctor, and an inspiring human being whose contribution to the medical fraternity continues to shine bright.

The Journey of Dr. Anil Kumar Jain

Born in the humble town of Lalitpur in UP, Dr. Anil Kumar Jain epitomized the journey of hard work, dedication, and success. After completing his MD and DM in Neurology from the prestigious King George Medical College (KGMC), Lucknow, he moved to Delhi in 1992 with dreams of creating something extraordinary in the field of healthcare. His dream took shape with the establishment of **Jain Neuro Centre** in 1994, which soon became a trusted name in neurological care.

Never one to rest on his laurels, Dr. Jain expanded his vision and founded **Jain Hospital** in 2002 — a 64-bedded multi-specialty hospital that continues to serve the community with distinction. Dr. Jain was not just a physician but a true entrepreneur, balancing his clinical brilliance with an innate ability to lead and inspire. Yet, beyond his professional achievements, those who knew him closely remember him for his ever-smiling face, his generosity, and the warmth with which he treated his patients, colleagues, and friends. He had the heart of gold and an unmatched zest for life — truly the happiest person many of us knew.

To commemorate his invaluable contributions, EDPA instituted the *Dr. A.P. Jain Memorial Postgraduate Medical Quiz* — a platform that celebrates knowledge, learning, and academic excellence, values that Dr. Jain himself cherished deeply.

The Grand Event: Dr. A.K. Jain Memorial PG Medical Quiz

The quiz was one of the highlights of EDPACON and saw overwhelming participation from postgraduate medical students across **11 medical colleges of Delhi-NCR**. The air was charged with excitement as young minds prepared to battle it out in this hour-long intellectual contest.

The quiz was expertly conducted by two eminent academicians — **Dr. Shubha Laxmi Margekar**, Professor of Medicine, Lady Hardinge Medical College (LHMC), New Delhi, and **Dr. Shivani Bansal**, Professor, Department of General Medicine, Santosh University, Ghaziabad. Both quizmasters brought energy, precision, and a perfect blend of academic rigor and interactive engagement, keeping the audience enthralled throughout.

Quiz Masters and Session Coordinators	
 **Dr. Shubha Laxmi Margekar** Professor of Medicine, Lady Hardinge Medical College (LHMC), New Delhi	 **Dr. Shivani Bansal** , Professor, Department of General Medicine, Santosh University, Ghaziabad

Our distinguished panel of judges comprised respected senior members of EDPA — **Dr. Ashok Kumar**, **Dr. Piyush Jain**, and **Dr. Nishesh Jain** — who ensured fairness and smooth conduct of the event.

What unfolded was a **thrilling and closely contested quiz**, where every question saw intense deliberation, quick responses, and impressive displays of knowledge. The level of competition was so high that it kept everyone — participants, judges, and audience — on the edge of their seats till the very last round.

Victory and Celebration of Knowledge

After a fiercely fought competition, the **team from RML Hospital (Dr. Ram Manohar Lohia Hospital, New Delhi)** emerged victorious, showcasing remarkable presence of mind and clinical acumen. **Lady Hardinge Medical College (LHMC)** secured the second position, while **University College of Medical Sciences (UCMS)** claimed the third spot.

FIRST PRIZE	SECOND PRIZE	THIRD PRIZE
Team R M L	**Team L H M C**	**Team U C M S**
Nitin Rathi	Srinivas	Rohan Kundaliya
Geetika Vats	Neeraj	Riya Jain
Abhishek Sikarwar	Abhishek	Sayok Das
Mohit Kumar	Yash	Prateek Suresh Gudadhe

It was a proud moment for all participating institutions, and the enthusiastic participation reflected the spirit of healthy competition and quest for knowledge — a true tribute by the EDPA to Dr. Anil Kumar Jain's legacy.

A Fitting Tribute

The Dr. A.P. Jain Memorial PG Quiz was not just an academic event but a celebration of Dr. Jain's life and values. The resounding success of the event stands testimony to the love and respect the medical community continues to have for him. Through this platform, EDPA hopes to continue inspiring young medical minds, just as Dr. Jain inspired all of us.

The EDPA extends heartfelt gratitude to all the participating colleges, our quizmasters, judges, and everyone who contributed to making this event a grand success. Dr. Anil Kumar Jain may no longer be with us, but his spirit lives on — in every patient cared for, every life saved, and every young doctor inspired by his journey.

EDPA committee has decided to made this quiz an annual feature — to keep his memory alive and to continue nurturing the values he stood for.

I. Neurology Symposium

Session Coordinator: *Dr Sahil Gupta, DM Neurology, EDPA member*

SCIENTIFIC SESSIONS			
9:40 am - 10:30 am	**NEUROLOGY SYMPOSIUM** **Acute Stroke Management During Window Period and Beyond** **Session Coordinator: Dr Sahil Gupta**		
9:40 am - 9:55 pm	**Medical Treatment with Thrombolysis**	Dr M V Padma Srivastava	Dr Puneet Aggarwal Dr Awadh Pandit Dr B K Gupta Dr Kamakshi Dhamija
9:55 am - 10:10 am	**Insights on Medical Thrombectomy in Stroke Management**	Dr Vipul Gupta	Dr Puneet Aggarwal Dr Awadh Pandit Dr B K Gupta Dr Kamakshi Dhamija
10:10 am -10:30 am	**Panel Discussion:** **Management of Acute Ischemic Stroke** **Moderator: Dr B K Gupta**	**Panelists:** Dr M V Padma Srivastava Dr Vipul Gupta Dr Awadh Pandit Dr Puneet Agarwal	

1. Medical treatment of Acute Stroke with Thrombolysis

The scientific session started with the Neurology Symposium. The first talk of the symposium was on '**Medical treatment of Acute Stroke with Thrombolysis'** by **Dr. (Prof.) M.V Padma Srivastava** who currently serves as the Chairperson of Neurology at Paras Health, Gurugram. Dr Padma is a Padmashree awardee by Govt. of India for the year 2016. Before joining Paras Hospital, she served as a Professor in neurology at AIIMS, Delhi, where she was in-charge of the thrombolysis program in AIIMS ; she is the Past President of the Indian Stroke Association and a current Board Member of the World Stroke Organization.

Speaker :
Dr. M V Padma Srivastava
MBBS, MD, DM (Neurology, AIIMS),
FRCP (EDIN), FAMS, F.N.A.SC, FIAN, FNA
Ex-Professor And Head Department Of Neurology, Chief Neurosciences Centre, AIIMS, New Delhi,
Chairman, Neurology, Paras Hospitals, Gurugram

Topic:
Medical treatment of Acute stroke with Thrombolysis

Chairpersons:
Dr Puneet Agarwal , Dr Awadh Pandit, Dr BK Gupta,
Dr Kamakshi Dhamija

Below are the key points and summary of her presentation

Stroke Burden and Impact:

- Stroke is a major health concern with high incidence and mortality rates (1 stroke every 30 seconds, 1 stroke death every 3 minutes, as per ICMR).Stroke significantly impacts patients' lives, causing disability, cognitive decline, and accelerated aging.

Advances in Neuroimaging:

- Rapid advancements in neuroimaging (CT and MRI) have revolutionized stroke diagnosis and management. These technologies allow for quick assessment of stroke type, location, vessel involvement, and potential for tissue salvage.

Time Sensitivity and Treatment Strategies:

- Time is critical in stroke management; every minute of delay results in neuronal loss. Intravenous thrombolysis (IVT) with tissue plasminogen activator (tPA) is a key treatment strategy, with two main drugs available: *alteplase and tenecteplase*. India was the first to approve tenecteplase, which is now widely used.
- Endovascular therapy (EVT) is another important treatment, particularly for large vessel occlusions, but the importance of dedicated stroke care units is emphasized.

IV Thrombolysis Guidelines and Practice:**

- Guidelines for IVT have expanded, extending the time window from 3 to 4.5 hours, and in some cases, up to 24 hours. The primary goal is to get patients into the IVT window, not to delay treatment once they arrive at the hospital. Setting up stroke protocols in emergency departments is crucial for rapid response.
- Regimens for alteplase and tenecteplase administration were discussed.
    - **Alteplase**
        - The recommended dose is 0.9 mg/kg. The total dose should not exceed 90 mg. Ten percent of the total dose gets administered as an intravenous (IV) bolus over 1 minute, and the infusion of the remainder occurs over 60

minutes. The administration should take place as soon as possible and within 4.5 hours of symptom onset.

- **Tenecteplase**
  - Tenecteplase is administered as a single 5-second intravenous bolus at weight-based tiered doses of 0.25 mg/kg or 0.50 mg/kg with a maximum dose of 50 mg. Tenecteplase has a half-life of 20 to 25 minutes.

- Based on current research, tenecteplase is generally considered to be a better choice than alteplase for treating acute stroke as it offers similar efficacy with a simpler administration method.
- Informed consent for thrombolysis is important, especially in private sector settings. Economic factors, particularly health insurance, are significant considerations in treatment decisions.

Blood Pressure / Hypertension

- Managing blood pressure during and after thrombolysis is vital, with specific target ranges. Cerebral blood flow in stroke patients depends on mean arterial pressure (MAP) and cardiac output. Aggressive blood pressure reduction can worsen ischemia. Both high and low blood pressures are linked to poor outcomes in acute stroke patients. Blood pressure usually drops within 24 hours after an acute stroke. Routine attempts to lower blood pressure in the acute phase of stroke should be avoided unless necessary. Recommendations for blood pressure management vary depending on whether patients are candidates for thrombolytic therapy.

Hypertension Control in Non–rt-PA Candidates:

- If systolic BP is below 220 mm Hg and diastolic BP is below 120 mm Hg without end-organ involvement, monitor BP without acute intervention. If BP exceeds these limits, labetalol or nicardipine may be used to control blood pressure.

Hypertension Control in rt-PA Candidates:

- For candidates receiving rt-PA, systolic BP >185 mm Hg and diastolic BP >110 mm Hg require intervention to avoid haemorrhagic complications. Close monitoring and BP control are crucial during and after thrombolytic administration.

Treatment Goals:

- Reduce BP by 10-15% initially and 15-25% within the first day. Monitor BP frequently and continue BP control during hospitalization.

Medications:

- Labetalol, nicardipine, and nitroprusside are commonly used medications. Sublingual nifedipine is discouraged due to the risk of extreme hypotension

Blood sugar

- Blood sugar control should be closely monitored in acute stroke patients to achieve a goal between 140 and 180 mg/dL.

Game Changers in Stroke Care:

- Dedicated stroke units are highlighted as essential for improving outcomes.
- Aspirin within 48 hours, decompressive hemicraniectomy for large strokes, and IV thrombolysis within 4.5 hours are identified as major game changers.
- The introduction of free thrombolytic drugs in some regions of India has improved access to timely treatment.

Managing Strokes Beyond Guidelines:

- Patients often present with stroke outside the standard guidelines, such as wake-up strokes, minor strokes, or stroke mimics.
- Advanced imaging techniques, such as diffusion-weighted and FLAIR MRI, can help identify salvageable brain tissue in these cases.
- The decision to thrombolize in cases of minor stroke or stroke mimics should be made on a case-by-case basis, considering the potential benefits and risks.
- Age is not an absolute contraindication for thrombolysis; even elderly patients may benefit.

Specific Considerations:

- Various clinical scenarios are discussed, including stroke in patients with recent surgery, leukoaraiosis, history of intracranial hemorrhage, subdural hematoma, brain tumors, systemic malignancies, aneurysms, AVMs, and those on antithrombotic drugs.
- The importance of considering the specific characteristics of each patient and tailoring treatment accordingly is emphasized.

Telestroke and Future Directions:

- Telestroke is highlighted as an important tool for expanding access to stroke care, especially in areas with limited resources.
- Ongoing research is focused on furthering the goalposts of stroke treatment and improving outcomes.

Key Takeaways:

- The message is to "never give up on your stroke patient" and to utilize all available resources and advancements to provide the best possible care.
- Despite low thrombolysis rates in some areas, increasing awareness and education about the benefits of timely treatment are crucial.
- Individualized decision-making, considering patient-specific factors and potential risks and benefits, is essential in stroke management.
- Emphasizes the importance of recognizing a stroke and initiating treatment as quickly as possible to maximize the chances of salvaging brain tissue and improving patient outcomes.
- The need for dedicated stroke units, timely administration of appropriate medications, and careful consideration of individual patient factors in making treatment decisions are all essential components of optimal stroke care.

2. Mechanical Thrombectomy in Stroke management

The Second talk in the neurology symposium was by Dr Vipul Gupta, on the topic – "**Mechanical Thrombectomy in Stroke Management".** Dr. Vipul Gupta is widely regarded as one of the most experienced and reputed neuro-interventionist in the country. He worked as Associate Professor Interventional Neuroradiology, AIIMS from July 2005– Dec 2005. His previous affiliations include as Head - Interventional Neuroradiology, Max Institute Of Neurosciences, Max Super speciality, Hospital, New Delhi; Head - Neurointerventional Surgery, Medanta The Medicity from 2009-2016. He is currently Director Neurointerventional Surgery (Interventional Neuroradiology) & Co-Director Comprehensive stroke care centre at Paras Hospital.

Speaker :
Dr. Vipul Gupta
MBBS (MAMC), MD Radiodiagnosis, Safdarjung Hospital, Delhi University
Director Neurointerventional Surgery (Interventional Neuroradiology) & Co-Director Comprehensive stroke care centre at Paras Hospital.

Topic:
Medical thrombectomy in Stroke management

Chairpersons:
Dr Puneet Agarwal, Dr Awadh Pandit, Dr BK Gupta, DR Kamakshi Dhamija

Dr. Gupta's lecture provided a comprehensive overview of mechanical thrombectomy, highlighting its efficacy, safety, and expanding indications. He emphasized the importance of speed, appropriate patient selection, and ongoing research to further improve outcomes in stroke care.

Key Points from Dr. Vipul Gupta's Lecture:

1. Stroke is Not Instantaneous:

- Unlike myocardial infarction, stroke is a progressive process where the infarct size increases over hours, even up to 48 hours in some cases.
- There is a "penumbra" zone of salvageable brain tissue surrounding the infarct core.

2. Limitations of Thrombolysis Beyond 4.5 Hours:

- While intravenous thrombolysis (tPA) is effective within the 4.5-hour window, its efficacy decreases beyond that.
- Large vessel occlusions (LVOs), although a small percentage of strokes, contribute significantly to death and disability.
- Thrombolysis has lower recanalization rates in LVOs.

3. Mechanical Thrombectomy: A Revolutionary Treatment for LVOs:

- Mechanical thrombectomy is a minimally invasive procedure that involves removing the clot from the blocked artery using specialized devices.
- Stent retrievers: Stent-like devices that are deployed across the clot, capture it, and are then removed.
- Aspiration catheters: Soft, flexible catheters that are advanced to the clot and used to aspirate it.
- Combined techniques (e.g., Solumbra, ADAPT): Using both stent retrievers and aspiration catheters for optimal clot removal.

4. Efficacy of Mechanical Thrombectomy:

- Multiple randomized controlled trials (RCTs) in 2015 demonstrated the strong efficacy of mechanical thrombectomy in improving outcomes in LVOs. It showed a significant reduction in death and disability compared to medical therapy alone, even in patients who received tPA.
- The number needed to treat (NNT) is around 4, indicating a very powerful treatment effect.

5. Current Indications for Mechanical Thrombectomy:

- Patients with pre-stroke modified Rankin Scale (mRS) score of 0-1 (functionally independent).
- Large vessel occlusion (ICA, M1, M2, M3, vertebral, basilar).
- NIHSS score ≥ 6 (significant neurological deficit).
- ASPECTS score ≥ 6 (not a large infarct on imaging).
- Initial trials focused on a 6-hour time window, but this has been extended to 24 hours based on newer data.

6. Role of Thrombolysis in the Thrombectomy Era:

- If eligible, intravenous thrombolysis should still be given before thrombectomy. The key is not to delay thrombectomy while waiting for thrombolysis to work. "Drip and ship" model: administer tPA and quickly transfer the patient to a thrombectomy-capable center.

7. Imaging in Patient Selection:

- Non-contrast CT is essential to rule out hemorrhage and assess the infarct core. CT angiography (CTA) or MR angiography (MRA) is used to confirm large vessel occlusion.
- CT perfusion or MR perfusion can be used in selected cases to visualize the penumbra, but clinical-radiological mismatch is often sufficient.

8. Time is Brain: The Importance of Speed:

- The faster the thrombectomy is performed, the better the outcomes. Every 30-minute delay significantly reduces the chances of a good outcome.
- Parallel processing (simultaneous evaluation, imaging, and intervention) is crucial to minimize delays. Artificial intelligence (AI) tools are being used in some centers to rapidly identify LVOs on imaging.

9. Technical Aspects of Thrombectomy:

- Most procedures are now performed under local anesthesia. The goal is to achieve complete recanalization (TICI 3) as quickly as possible, ideally with the first pass ("first-pass effect").
- Various techniques and devices are used to optimize clot removal, including balloon guide catheters, long stent retrievers, and aspiration catheters. Clot imaging (e.g., on MRI) can help predict clot composition and guide the choice of technique.

10. Expanding Indications for Thrombectomy:

- Larger infarcts: Recent trials (e.g., SELECT2, ANGEL-ASPECT, TENSION) suggest that thrombectomy may be beneficial even in patients with larger infarcts.
- Distal occlusions: Thrombectomy is being performed for more distal occlusions (M2, M3).
- Low NIHSS scores: Role of thrombectomy in patients with low NIHSS scores but LVOs is being investigated.
- Direct to thrombectomy: Whether to bypass intravenous thrombolysis and proceed directly to thrombectomy in certain patients is an area of ongoing research.

11. Challenges and Future Directions:

- Financial implications: Thrombectomy can be expensive, and cost-effectiveness needs to be considered, especially in resource-limited settings.
- Access to care: Not all hospitals have the expertise / infrastructure to perform thrombectomy.
- Training and expertise: There is a need for more trained neurointerventionists.
- Ongoing research: Further research is needed to refine patient selection criteria, optimize techniques, and explore new indications.

Key Takeaways:

- Mechanical thrombectomy is a revolutionary treatment for acute ischemic stroke due to large vessel occlusion. It significantly improves outcomes compared to medical Rx alone.
- Time is of the essence; rapid treatment is crucial; Patient selection criteria are expanding.
- Need for greater awareness among physicians & public about the importance of early recognition and treatment of stroke. Need for continued training & education of HCPs in stroke management.
- Importance of developing stroke systems of care to ensure timely access to thrombectomy-capable centers; Role of telestroke in expanding access to areas with limited resources.
- Importance of post-stroke rehabilitation to maximize functional recovery; Addressing disparities in stroke care and outcomes.
- Ongoing research and technological advancements are further improving the efficacy and safety of thrombectomy; Potential for new technologies, such as artificial intelligence and robotics, to enhance stroke care.
- The ultimate goal of stroke care is to reduce the devastating impact of stroke on individuals, families, and society.

3. Panel discussion : Management of Acute Ischemic Stroke

The last part of the Neurology symposium was an interactive panel discussion on Management of Acute Ischemic Stroke. The panellists included eminent neurologists namely Dr M.V. Padma Srivastava, Dr. Vipul Gupta, Dr. Awadh Pandit, Dr. Puneet Agarwal **.** The panel discussion was moderated by senior neurologist and EDPA member, Dr BK Gupta.

Panel Discussion:
Management of Acute Ischemic Stroke

Moderator:
Dr BK Gupta, Senior Consultant Neurologist, EDPA

Panellists:

Dr. M V Padma Srivastava,
Chairman, Neurology, Paras Hospitals, Gurugram

Dr Puneet Agarwal
Principal Director Neurology, MAX Super speciality hospital, Saket

Dr Vipul Gupta
Group director & head– neurointerventional surgery, Paras hospital

Dr Awadh Kishor Pandit,
Additional Professor, Neurology AIIMS, New Delhi

Key Points of the Panel Discussion : Management of Acute Ischemic Stroke:

1. Blood Pressure Management in Acute Ischemic Stroke:

- Pre-thrombolysis: BP should be < 185/110 mmHg before intravenous thrombolysis (IVT).
- Post-thrombolysis: BP should be maintained below 180/105 mmHg.
- Post-thrombectomy: Similar to post-thrombolysis, BP should be kept below 180/105 mmHg.
- Patients not eligible for reperfusion therapy: BP can be kept higher, up to 220/120 mmHg. If it exceeds this, antihypertensives should be used.

- General principles: Avoid rapid BP fluctuations; a J-shaped curve relationship exists between BP and outcomes.; Gradual BP reduction is preferred (less than 15% in the first 24 hours). After 24 hours, more aggressive BP control is recommended (target < 140/90 mmHg).

2. Antiplatelet Therapy in Acute Ischemic Stroke:

- Dual antiplatelet therapy (DAPT): Recommended for 21 days in patients with acute ischemic stroke or high-risk TIA. Loading dose of clopidogrel (300-600 mg) followed by 75 mg daily, plus aspirin 75-100 mg daily.
- Single antiplatelet therapy (SAPT): After 21 days of DAPT, switch to SAPT for long-term secondary prevention.

3. Neuroprotective Agents:

- Current status: No neuroprotective agent has been definitively proven to improve outcomes in acute ischemic stroke in large-scale trials. FDA has not approved any neuroprotective drug for this indication. Indian Stroke Association guidelines do not recommend any specific neuroprotective agent.
- Specific agents: Citicoline: Some evidence of benefit, but not conclusive. Commonly used in practice despite lack of strong evidence.
    - Piracetam: Not recommended.
    - Edaravone: Approved in Japanese guidelines, but not widely adopted elsewhere.
    - Cerebrolysin: Not recommended.
    - SoRI-200K (so essentiale): Some trials ongoing, but no conclusive evidence yet.
    - Alpha GPC: Not recommended.
    - Nicorandil: Not recommended.
- Future directions: Larger, well-designed trials are needed to evaluate the efficacy of potential neuroprotective agents.

4. Embolic Stroke of Undetermined Source (ESUS):

- Definition: Non-lacunar ischemic stroke without a clear cardioembolic or large artery atherosclerotic source after standard evaluation.
- Prevalence: Accounts for 9-20% of ischemic strokes.
- Potential causes:
    - Atrial cardiopathy.
    - Atrial septal defects.
    - Vulnerable carotid plaques (less than 50% stenosis).
    - Pre-malignant or cancer-associated states.
- Investigations: D-dimer (may suggest pre-malignant state), Transesophageal echocardiography (TEE) for detailed cardiac evaluation, Prolonged cardiac monitoring (e.g., implantable loop recorder) to detect paroxysmal atrial fibrillation.

5. Young Stroke with Hyper-homocysteinemia and MTHFR Mutation:

- Management: Investigate for other causes of stroke ("double-hit" hypothesis). Continue antiplatelet therapy long-term, similar to other stroke patients. Consider B vitamins (B1, B6,

B12) supplementation. They are harmless. Role of specific drugs like betaine in homozygous MTHFR mutations (more research needed). For heterozygous MTHFR mutations, continue antiplatelets.

6. Antiplatelet Use During Dental Procedures or Cataract Surgery:

- General recommendation: Do not stop single antiplatelet therapy (e.g., aspirin) for dental procedures or cataract surgery. Stopping aspirin for dental procedures is generally not recommended and outdated advice.
- Specific considerations: For DAPT with ticagrelor, consider stopping ticagrelor temporarily and continuing aspirin. If high risk of bleeding with DAPT, discuss with the surgeon and consider temporary discontinuation.

7. Thrombolysis in Patients on Antiplatelets or NOACs:

- Antiplatelets: Do not preclude thrombolysis.
- NOACs:
    - If the last dose of NOAC was taken more than 48 hours prior, thrombolysis can generally be considered.
    - If the last dose was within 48 hours, consider specific tests (if available) like ecarin clotting time (ECT) or thrombin time to assess the anticoagulant effect.
    - If these tests are not available or if there is uncertainty about NOAC intake, thrombolysis may be withheld.
    - For dabigatran, assess aPTT; for rivaroxaban or apixaban, assess INR.

8. Other Important Points:

- The panel emphasized the importance of timely reperfusion therapy (IVT and/or mechanical thrombectomy) in eligible patients.
- The need for increased awareness and education about stroke management among healthcare professionals and the public.
- The importance of individualized decision-making, considering patient-specific factors and preferences.
- The role of stroke units in improving outcomes and need for ongoing research to develop new and more effective stroke treatments.

II. Gastreoenterology & Hepatology Session

Session Coordinator: *Dr Naresh Agarwal, DM Gastroenterology, EDPA member*

10:30 am - 11:20 am	GASTROENTEROLOGY AND HEPATOLOGY SESSION Session Coordinator: Dr Naresh Aggarwal		
10:30 am - 10:55 am	**Fat in the Liver- Friend or Foe?**	Dr Anil Arora	Dr Deepak Lahoti Dr N K Govil Dr Amitesh Aggarwal
10:55 am - 11:20 am	**Paradigm Changes in Medical Management of Inflammatory Bowel Disease**	Dr Vineet Ahuja	Dr Rajeev Bansal Dr Vaishali Bharadwaj Dr S K Gupta

1. Fat in the liver- Friend or foe?

The second symposium was the Gastreoenterology and Hepatology Session. The first talk in this session was given by **Dr. Anil Arora** , Chairman , Institute of liver gastroenterology and pancreaticobiliary sciences and Head , Liver transplant unit at Sir Ganga Ram Hospital .

His talk provided a comprehensive overview of the role of fat in the body, the causes and consequences of fatty liver disease, and the importance of lifestyle modifications in management. He highlighted the complex interplay between fat, insulin resistance, inflammation, and various organ systems, emphasizing the need for a holistic approach to address this growing health problem.

Speaker :
Dr. Anil Arora
MBBS, DNB(MED),MD, DM (Gastroenterology) AIIMS
Chairman, Institute of liver gastroenterology and pancreaticobiliary sciences and Head, Liver transplant unit at Sir Ganga Ram Hospital

Topic:
Fat in the liver- Friend or foe?

Chairpersons:
Dr Deepak Lahoti, Dr NK Govil Dr Amitesh Agarwal

Key Points from Dr. Anil Arora's Lecture: "Fat in the Liver - Friend or Foe?":

1. Understanding Fat:

- Fat can refer to a type of tissue, a cell type (adipocyte), a class of molecules (hydrocarbons), or a tissue called fatty tissue. Fatty acids are hydrocarbon chains, typically with 16-18 carbons in humans.
- Triglycerides are the main form of fat in the body and diet, composed of glycerol and three fatty acids. Saturated fatty acids have single bonds between carbons, are solid at room temperature (e.g., butter), and cannot be hydrogenated.
- Unsaturated fatty acids have at least one double bond between carbons and are liquid at room temperature. Monounsaturated fatty acids (MUFAs): One double bond. While Polyunsaturated fatty acids (PUFAs): More than one double bond.
- Trans fats are considered the worst type of fat for human health and are commonly found in processed foods.

2. The Role of Fat in the Body:

- Energy Source: Fat is a major source of energy, especially during fasting. Adipose tissue provides the most significant energy reserve.
- Structural Component: Phospholipids (fatty acids + phosphate) are essential for cell membrane integrity.
- Hormone Production: Fats are precursors for cholesterol and various hormones.
- Other Functions:
    - Healthy skin and hair.
    - Body temperature regulation.
    - Cell function.
    - Cushioning of organs.
    - Neurological function (brain and retina).
    - Absorption of fat-soluble vitamins.
    - Immunity booster.

- Shock absorber for bones.

3. When Fat Turns Foe: The Problem of Excess:

- Over the last 30 years, humans have been consuming significantly more calories, leading to increased fat storage. Excessive calorie intake leads to fat accumulation, initially in subcutaneous tissue and then in visceral adipose tissue and vital organs (liver, kidney, heart, lungs). India has the third-highest population of fatty liver disease in the world.
- Metabolic Syndrome: Excess fat, obesity, insulin resistance, and fatty liver are interconnected and contribute to a cascade of health problems.

4. The Development of Fatty Liver Disease:

- Leptin Resistance: Normally, leptin (released from adipose tissue) signals satiety to the hypothalamus. In obesity, the hypothalamus becomes resistant to leptin, leading to continued eating despite high energy stores.
- Adipocyte Dysfunction: When adipocytes become overloaded with fat, mitochondria are damaged, leading to the release of pro-inflammatory cytokines and insulin resistance.
- Sources of Fat in the Liver:
  - 60% from lipolysis (breakdown of stored fat).
  - 20% from de novo lipogenesis (synthesis of fatty acids in the liver from carbohydrates).
  - 20% from dietary fat.
- Fructose is particularly problematic as it overloads the liver and promotes fat synthesis.

5. Consequences of Fatty Liver Disease:

- Metabolic Complications: Diabetes, hypertension, stroke, myocardial infarction, gut dysbiosis.
- Leading Causes of Death in Fatty Liver Disease:
  - Cardiovascular disease.
  - Non-liver malignancies.
  - Liver disease (cirrhosis, hepatocellular carcinoma).
- Other Complications:
  - Chronic kidney disease.
  - Endocrinopathies (hypothyroidism, PCOS, osteoporosis, hypogonadism).
  - Increased risk of GI cancers.

6. The Paradox of Fat:

- Fat is essential for health and provides numerous benefits. However, excessive fat accumulation, particularly in the liver, leads to a wide range of health problems.

7. Treatment of Fatty Liver Disease:

- Calorie Restriction: Reducing overall calorie intake is crucial.
- Weight Loss: Losing weight improves insulin sensitivity and reduces liver fat.

- Exercise: Regular physical activity is essential.
- Alcohol Avoidance: Alcohol is detrimental to liver health, especially in the context of fatty liver.
- There is no approved medication for fatty liver as yet except Resmetirom, sold under the brand name Rezdiffra, which is approved for treating noncirrhotic non-alcoholic steatohepatitis (NASH) in adults, and it's a liver-directed, orally active, selective thyroid hormone receptor-β agonist. (not available in India).

8. Key Takeaways:

- Fat is an energy-rich nutrient with vital functions in the body. Dietary excess and the development of fatty liver and insulin resistance are crucial steps in the disease cascade. Fatty liver disease is associated with a plethora of health problems, affecting multiple organ systems.
- Lifestyle modifications (calorie restriction, weight loss, exercise, alcohol avoidance) are the cornerstones of management.

Additional Points:

- Dr. Arora emphasizes the importance of addressing fatty liver disease early and aggressively. He highlighted the interconnectedness of fatty liver, insulin resistance, and metabolic syndrome.
- He discussed the role of inflammation in the pathogenesis of fatty liver-related complications. The potential for fatty liver to progress to cirrhosis and hepatocellular carcinoma is emphasized.
- The need for a multidisciplinary approach to manage fatty liver disease, involving physicians, dietitians, and other healthcare professionals. The importance of patient education and engagement in lifestyle changes to improve outcomes, and the need for ongoing research to develop more effective treatments for fatty liver disease.

2. Paradigm changes in Medical management of IBD

The seconds talk of gastro session was by **Dr Vineet Ahuja**, Professor ,Gastroenterology at All India Institute of Medical Sciences, New Delhi .

His lecture on management of IBD provided a comprehensive overview of the current state of IBD management, emphasizing the significant progress that has been made while acknowledging the remaining challenges. He highlighted the importance of a multidisciplinary approach, involving gastroenterologists, surgeons, and other healthcare professionals, to provide optimal care for patients with IBD.

Speaker :
Dr. Vineet Ahuja
MBBS, MD, DM (Gastroenterology)
Professor, Gastroenterology, AIIMS, New Delhi

Topic:
Paradigm changes in Medical management of IBD

Chairpersons:
Dr Rajeev Bansal, Dr Vaishali Bhardwaj, Dr SK Gupta

Key Points from Dr. Vineet Ahuja's Lecture on Inflammatory Bowel Disease (IBD):

1. IBD Overview:

- IBD (Crohn's disease and ulcerative colitis) are chronic, relapsing inflammatory diseases of the gastrointestinal tract. They are lifelong conditions with no known cure, characterized by periods of remission and flares.
- IBD can affect the colon (ulcerative colitis) or any part of the GI tract (Crohn's disease).

2. Traditional Treatment Limitations:

- Historically, IBD treatment relied on basic therapies like steroids, azathioprine, and cyclosporine. These treatments often had limited efficacy and significant side effects.
- Surgical options were available but could be complex and not always curative (especially in Crohn's).

3. The Changing Landscape of IBD Treatment:

- The past 10-15 years have witnessed a revolution in IBD therapy with the introduction of biologics and small molecules. Multiple drugs are now available, offering a wider range of treatment options tailored to individual patients. Most of these FDA-approved drugs are also available in India.

4. Advanced Therapies:

- Biologics (Monoclonal Antibodies):
    - Anti-TNF agents (Infliximab, Adalimumab): Block tumor necrosis factor (TNF), a key inflammatory cytokine.
    - Vedolizumab: Blocks lymphocyte trafficking to the gut by targeting α4β7 integrin.
    - Ustekinumab: Blocks IL-12 and IL-23 pathways, two major inflammatory pathways.
    - Risankizumab: Blocks IL-23 pathway.
- Small Molecules:
    - Tofacitinib: A Janus kinase (JAK) inhibitor that blocks multiple cytokine pathways. Effective in ulcerative colitis but not yet in Crohn's disease.
    - Upadacitinib: A newer JAK inhibitor, soon to be launched, effective in both ulcerative colitis and Crohn's disease.

5. Case Examples:

- Dr. Ahuja presented several cases to illustrate the complexities and challenges of IBD management.
- **Case 1**: A patient with a 50-year history of ulcerative colitis, highlighting the evolution of treatment options over time and the concept of drug sequencing.
- **Case 2:** A patient with fistulizing Crohn's disease, initially misdiagnosed as idiopathic cryptoglandular fistula, who was later found to have syphilis and AIDS. This case emphasizes the importance of accurate diagnosis and considering infections.
- **Case 3**: A young woman with chronic diarrhea, initially suspected to have Crohn's disease, who was ultimately diagnosed with Strongyloidiasis. This case highlights the need for thorough evaluation and the potential for misdiagnosis.
- **Case 4**: An 18-year-old male with chronic diarrhea, initially treated with anti-tubercular therapy, then with biologics, who was ultimately diagnosed with NKT cell lymphoma after surgery. This case emphasizes the importance of considering malignancies in the differential diagnosis.
- Case 5: Emphasized the challenge of opportunistic infections in immunosuppressed patients.

6. Challenges in IBD Management:

- No Gold Standard Test: There is no single definitive test for diagnosing IBD, making diagnosis challenging.
- Differential Diagnosis: Differentiating IBD from other conditions like tuberculosis is crucial, especially in regions where TB is endemic.
- Therapeutic Drug Monitoring and Pharmacogenomics: These tools can help optimize treatment but are not always readily available.
- Infective Complications: Immunosuppressive therapies increase the risk of infections, requiring careful monitoring.

- Cost of Advanced Therapies: Biologics and small molecules are expensive, limiting access for many patients in India.
- Surgery: While surgery can be lifesaving, there are so many agents available, it becomes difficult to decide when to go for surgery.

7. Key Concepts in IBD Management:

- Drug Sequencing: Using different drugs in a sequential manner to control inflammation and maintain remission.
- Exit Therapy: Having a plan to stop or switch drugs when needed.
- Informed Patients: Patients should be well-informed about their disease and treatment options.
- Deep Remission: The goal of treatment is not just clinical remission but also endoscopic remission (mucosal healing).
- Biosimilars: Biosimilars offer a more affordable alternative to originator biologics, with similar efficacy.
- Dual Advanced Therapy: Combining different biologics or a biologic with a small molecule in refractory cases.

8. Future Directions:

- More research is needed to understand the exact cause of IBD and develop a cure. Newer and more effective therapies are on the horizon.

9. Take-Home Message:

- IBD management has significantly advanced with the availability of biologics and small molecules. There are many opportunities but also challenges in treating IBD.
- Careful diagnosis, individualized treatment plans, and close monitoring are essential for optimal patient outcomes.

III. Infectious Disease session:

The next session was Infectious Disease session, which included one lecture and one panel discussion.

Session Coordinators:

Dr Ruby Bansal
Infectious Disease Specialist
Max PPG, EDPA member

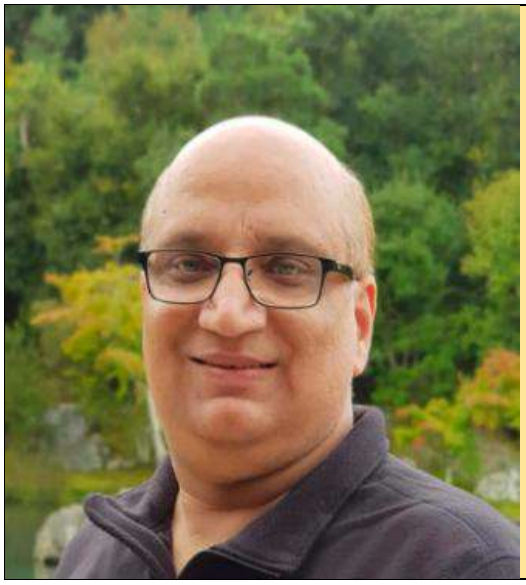
Dr Anivita Agarwal
DM Infectious Diseases, Sir Ganga Ram Hospital
EDPA member

11:20 am - 12:00 pm	**INFECTIOUS DISEASES SESSION** **Session Coordinators: Dr Anivita Aggarwal Dr Ruby Bansal**		
11:20 am - 11:40 am	**Post-Exposure Prophylaxis in Clinical Practice- Bites, Cuts, Nicks & Pricks**	Dr Vikas Suri	Dr Ruby Bansal Dr Sanjay Mahajan Dr B K Tiwari
11:40 am- 12:00 pm	**Panel Discussion-Reducing Infections in Hospitals, Nursing Homes, and Clinics, Preventing AMR**	**Panelists:** Dr Vikas Suri Dr S Anuradha Dr Anupam Singh	

1. Post exposure prophylaxis in clinical Practice- Bites, Cuts, Nicks & Pricks

The first talk in ID session was by **Dr. Vikas Suri**, Professor, Division of Infectious Diseases, Department of Internal Medicine, PGIMER Chandigarh.

Dr. Suri's lecture provided a comprehensive overview of post-exposure prophylaxis for animal bites, insect bites, and needlestick injuries. He emphasized the importance of prompt and appropriate wound care, timely administration of rabies vaccine and immunoglobulin, and adherence to established guidelines. He also highlighted the need for ongoing education and prevention efforts to reduce the burden of these injuries.



Speaker :
Dr. Vikas Suri
MBBS,MD,DNB,FICP,MNAMS,
Professor, Division of Infectious Diseases, Department of Internal Medicine,
PGIMER Chandigarh

Topic:
Post exposure prophylaxis in clinical Practice- Bites, Cuts, Nicks & Pricks

Chairpersons:
Dr Ruby Bansal , Dr Sanjay Mahajan , Dr BK Tiwari

Key Points from Dr. Vikas Suri's Lecture on Post-Exposure Prophylaxis (PEP) in Clinical Practice - Bites, Cuts, Nicks & Pricks:

I. Animal Bites (with a focus on Rabies):

A. Rabies - A Deadly but Preventable Disease:

- Rabies is a fatal viral infection transmitted through the saliva of infected animals, most commonly dogs in India. It is emphasized that rabies is nearly 100% fatal once symptoms develop, but it is also nearly 100% preventable with timely post-exposure prophylaxis (PEP).

B. Wound Classification:

- Category I: Licks on intact skin - No PEP required.
- Category II: Nibbling on uncovered skin, minor scratches or abrasions without bleeding - Requires rabies vaccine. Immunoglobulin is added if patient is immunocompromised.
- Category III: Single or multiple transdermal bites or scratches, licks on broken skin, contamination of mucous membranes with saliva - Requires rabies vaccine and rabies immunoglobulin.

C. Post-Exposure Prophylaxis (PEP):

- Wound Management:
    - Immediate and thorough washing of the wound with soap and water for at least 15 minutes is crucial. This can reduce the risk of rabies significantly.
    - Running water is the best form.
    - Disinfection with virucidal agents like povidone-iodine is recommended.
    - Avoid suturing the wound immediately unless absolutely necessary. If needed, infiltrate with rabies immunoglobulin before suturing.
    - Avoid applying local irritants (e.g., turmeric) or squeezing the wound.
- Passive Immunization:
    - Rabies Immunoglobulin (RIG):

    - Indicated for all Category III exposures and Category II exposures in immunocompromised individuals.
    - Infiltrate as much as possible of the calculated dose around and into each wound.
    - The previous practice of injecting the remainder intramuscularly is no longer recommended.

Dosage:

- Equine RIG (ERIG): 40 IU/kg (maximum dose should be clarified, as there was a mention of a maximum of 1500 units, which may be incorrect or outdated).
- Human RIG (HRIG): 20 IU/kg.
- Administer as soon as possible after exposure, ideally within 24 hours, but can be given up to 7 days after the first vaccine dose.
- Anaphylaxis is rare, especially with HRIG.

Monoclonal Antibodies:

- Newer option, such as Rabishield (rabies human monoclonal antibody).
- Potentially lower volume needed for infiltration; Efficacy appears comparable to RIG.
- Not yet widely adopted in guidelines due to cost.

Dosage is much lower.

- Active Immunization:

- Rabies Vaccine: Indicated for all Category II and III exposures.
    - Various cell culture vaccines are available (e.g., chick embryo cell vaccine, human diploid cell vaccine).
    - Neural tissue vaccines are no longer recommended.

Intramuscular (IM) Regimens:

- Essen regimen: 5 doses (0, 3, 7, 14, 28 days). Recommended by the Indian government.
- Updated WHO recommendation: 4 doses (0, 3, 7, 14 days).
- Zagreb regimen: 2-1-1 (2 doses on day 0, then 1 dose on day 7 and day 21). Not approved in India.

Intradermal (ID) Regimens:

- Updated Thai Red Cross regimen: 2 sites (0.1 ml each) on days 0, 3, 7, and 28.
- One-week, 4-site regimen: Under investigation.

Important Considerations:

- Always administer in the deltoid muscle, not the gluteal region.
- Day 0 is the day of the first vaccine dose.
- ID regimens are more cost-effective but require proper training and vial sharing within the same day.
- IM vaccines with potency >2.5 IU can be used for ID administration, but not vice-versa.
- Switching between IM and ID is generally not recommended. Maintain the same route.

Re-exposure:

- If bitten again within 3 months of completing a full PEP course, no further treatment is needed.

- If bitten after 3 months, give 2 booster doses of vaccine (days 0 and 3) - no need for RIG.
- Incomplete or doubtful prior vaccination requires a full PEP course.

Special Situations:

- Drinking milk from a rabid animal: Safe if boiled.
- HIV-infected individuals: Treat Category II exposures like Category III (vaccine + RIG). Thorough infiltration of RIG is essential. Check rabies antibody titers after vaccination.
- Chloroquine use: May reduce the immunogenicity of ID rabies vaccine. IM route is preferred.
- Pregnancy: No contraindication to rabies PEP.
- Elderly: Age is not a contraindication.
- Immunocompromised: May require more aggressive PEP and monitoring of antibody titers.

D. Other Animal Bites:

- Rodent and bat bites in India generally do not require rabies PEP, as rabies has not been reported in these animals in India.

II. Insect Bites:

- Honeybees, hornets, and wasps are the most common culprits. Reactions can range from local swelling to anaphylaxis.
- First aid: Clean the wound, use antihistamines, and watch for signs of anaphylaxis.

III. Needlestick Injuries (NSIs) in Healthcare Workers:

- Risk of transmission of bloodborne pathogens (HIV, HBV, HCV). Immediate action is to wash the wound thoroughly with soap and water.
- PEP based on the source patient's status and the type of exposure.
- HIV PEP:
    - PEP is indicated if the source is HIV-positive or if the source's status is unknown and the exposure is significant.
    - Various PEP regimens are available (refer to NACO guidelines). PEP should be started as soon as possible, ideally within hours of exposure.
- Hepatitis B PEP:
    - Hepatitis B vaccine and/or immunoglobulin may be indicated, depending on the source's HBsAg status and the exposed person's vaccination history.
- Hepatitis C:
    - No PEP is available for HCV. Monitoring and early treatment if infection occurs.

IV. General Principles:

- Prevention is better than cure. Educate the public about rabies and the importance of timely PEP. Promote responsible pet ownership and animal vaccination.
- Healthcare workers should be trained in infection control practices and PEP protocols. Follow national and international guidelines for PEP.

Key Takeaways:

- Rabies is a serious but preventable disease. Thorough wound washing is the first and most important step in rabies PEP. Timely administration of rabies vaccine and immunoglobulin (when indicated) is crucial. Newer options like monoclonal antibodies are emerging but are not yet widely used.
- Needlestick injuries in healthcare workers require prompt evaluation and appropriate PEP. Prevention through education, vaccination, and infection control practices is paramount.
- Every animal bite should be thoroughly evaluated. A detailed history of the bite, including the type of animal, behavior of the animal, and circumstances of the bite, is essential. The wound should be thoroughly examined and classified according to the WHO categories.
- Assess the patient's general health status, including any underlying medical conditions or medications that may affect the risk of rabies or the response to PEP. Determine the patient's previous rabies vaccination history.
- If rabies PEP is indicated, it should be initiated as soon as possible, ideally within 24 hours of exposure. Administer rabies immunoglobulin (RIG) for Category III exposures and Category II exposures in immunocompromised individuals. Infiltrate the full dose of RIG around the wound(s), if anatomically feasible.
- Administer the rabies vaccine intramuscularly (IM) or intradermally (ID) according to the recommended schedule. Monitor the patient for any adverse reactions to the vaccine or RIG.
- Provide tetanus prophylaxis if indicated. Consider antibiotics if the wound is clinically infected or if there is a high risk of infection.
- Educate the patient about wound care, signs of infection, and the importance of completing the full course of PEP. Report the animal bite to the appropriate public health authorities.
- Ensure follow-up to assess the patient's response to PEP and to monitor for any signs of rabies. Consider pre-exposure rabies vaccination for individuals at high risk of exposure, such as veterinarians, animal handlers, and laboratory workers.
- Promote responsible pet ownership, including vaccination of dogs and cats against rabies. Support public health efforts to control rabies in animals and humans.
- Advocate for increased access to affordable rabies PEP, especially in resource-limited settings. Participate in continuing education to stay up-to-date on the latest guidelines and recommendations for rabies prevention and management.
- Collaborate with other healthcare professionals, such as infectious disease specialists, emergency physicians, and public health officials, to optimize the care of patients with animal bites.
- Conduct research to improve our understanding of rabies and to develop new and more effective prevention and treatment strategies. Remember that every animal bite is a potential medical emergency, and timely and appropriate PEP can save lives.

2. Panel discussion : Reducing Infections in Hospitals, Nursing Homes, and Clinics, Preventing Antimicrobial Resistance (AMR)

The next part of the ID session was a panel discussion on the topic of Reducing Infections in Hospitals, Nursing Homes, and Clinics, and Preventing Antimicrobial Resistance (AMR)

Topic:
Reducing Infections in Hospitals, Nursing Homes, and Clinics, Preventing Antimicrobial Resistance (AMR)

Moderator:
Dr. Anvita Agarwal, DM Infectious Diseases
Consultant, Sir Gangaram Hospital

Dr Vikas Suri
Professor, Division of Infectious Diseases
Dept. of Internal Medicine, PGIMER
Chandigarh

Dr Anupam Singh
Senior consultant physician, EDPA

Dr S Anuradha
Director Professor, Medicine
MAMC, New Delhi

Dr Sarita Mohapatra
Additional Professor, Microbiology,
AIIMS, New Delhi

This panel discussion provided an overview of the challenges and strategies for reducing infections and preventing antimicrobial resistance in various healthcare settings. It emphasized the importance of a multifaceted approach that includes basic infection control practices, antibiotic stewardship, laboratory support, staff training, and the use of technology. The discussion highlighted the need for collaboration, leadership, and ongoing efforts to address this critical public health issue.

Key Points of the Panel Discussion: Reducing Infections in Hospitals, Nursing Homes, and Clinics, Preventing Antimicrobial Resistance (AMR):

1. Challenges in Infection Prevention and Control (IPC):

- Resource Constraints:
    - Shortage of dedicated infection control staff (e.g., infection control nurses).
    - Limited availability of microbiology services, especially in smaller facilities.
    - Outsourcing of microbiology can lead to delays in reporting and communication.
- Overcrowding: High patient volumes, especially in tertiary care centers, make it difficult to implement effective IPC measures.
- Staff Training and Awareness:
    - Lack of awareness and training among healthcare workers (HCWs) regarding basic IPC practices.
    - Resistance to change and adopting new practices.

- Antibiotic Overuse and Misuse:
    - Inappropriate antibiotic prescribing, driven by factors like lack of diagnostic certainty, patient demand, and fear of complications.
    - Empiric use of broad-spectrum antibiotics without de-escalation.
    - Lack of antibiotic stewardship programs in many settings.
- Airborne Infections: Controlling airborne infections is a major challenge, particularly in OPD settings with large patient volumes.

2. Specific Challenges in Different Settings:

- Tertiary Care Hospitals:
    - High patient turnover.
    - Diverse patient population with complex medical conditions.
    - Presence of multidrug-resistant organisms (MDROs).
    - Airborne infection control.

- Smaller Nursing Homes and Clinics:
    - Limited resources and infrastructure.
    - Lack of dedicated infection control personnel.
    - Outsourcing of laboratory services.
    - Multiple consultants with varying antibiotic prescribing practices.

3. Key Strategies for Infection Prevention and Control:

- Hand Hygiene:
    - Emphasized as the single most important measure to prevent healthcare-associated infections (HAIs).
    - Need for consistent adherence among all HCWs.
- Care Bundles: Implementation of care bundles for common procedures (e.g., central line insertion, catheterization) to standardize practices and reduce infection risk.
- Environmental Cleaning and Disinfection: Regular cleaning and disinfection of patient care areas and equipment.
- Surveillance: Monitoring of HAIs and MDROs to identify trends and outbreaks.
- Staff Training and Education: Regular training programs for all HCWs on basic IPC principles. Emphasis on hand hygiene, personal protective equipment (PPE) use, and aseptic techniques.
- Antimicrobial Stewardship:
    - Development and implementation of antibiotic stewardship programs to optimize antibiotic use.
    - Formulary restrictions, pre-authorization for certain antibiotics, and prospective audit and feedback.
    - Collaboration between clinicians, pharmacists, and microbiologists.
- Use of Technology: Automated blood culture systems to improve the yield and turnaround time of cultures. Artificial intelligence (AI) tools for early detection of outbreaks and identification of patients at risk of infection.

4. Role of Microbiology Laboratory:

- Rapid and Accurate Diagnostics: Timely identification of pathogens and their antibiotic susceptibility patterns. Use of rapid diagnostic tests (e.g., molecular tests) where appropriate.
- Communication and Collaboration: Close communication between the laboratory and clinicians to guide antibiotic therapy. Development of antibiograms to inform empiric therapy.
- Infection Control Support: Participation in infection control committees and rounds. Assistance with outbreak investigations.

5. Importance of a Multidisciplinary Approach:

- IPC and AMR prevention require a team effort involving:
    - Clinicians (physicians, surgeons, nurses).

    - Infection control professionals.
    - Microbiologists.
    - Pharmacists.
    - Hospital administrators.
- Leadership support and commitment are essential for successful implementation of IPC and AMS programs.

6. Specific Recommendations:

- OPD Settings: Focus on hand hygiene, respiratory etiquette, and airborne infection control measures. Judicious use of antibiotics, avoiding unnecessary prescriptions.
- Small Nursing Homes: Train existing staff in basic IPC practices. Develop a simple antibiotic policy in consultation with a senior physician or infectious disease specialist. Consider implementing automated blood culture systems. Establish a WhatsApp group or other communication channel with the microbiology laboratory.
- Tertiary Care Hospitals: Strengthen infection control teams and provide adequate resources. Implement comprehensive surveillance programs. Promote antibiotic stewardship through education, guidelines, and audit and feedback. Utilize technology to enhance IPC and AMS efforts.

7. Other Important Points:

- The need for ongoing monitoring and evaluation of IPC and AMS programs. The importance of adapting strategies to the local context and resources.
- The role of patient education in promoting infection prevention and responsible antibiotic use. The need for continued research to develop new and more effective infection control and prevention strategies.

Key Takeaways:

- Infection prevention and control and antimicrobial resistance are major challenges in all healthcare settings. A multidisciplinary approach, involving all stakeholders, is essential.
- Basic IPC measures, such as hand hygiene, are highly effective. Antibiotic stewardship programs are crucial to optimize antibiotic use.
- Microbiology laboratories play a vital role in diagnosis, surveillance, and infection control. Technology can enhance IPC and AMS efforts.
- Ongoing education, training, and awareness are essential to improve practices and reduce the burden of HAIs and AMR. Leadership commitment and a culture of safety are critical for success.
- The need for a national action plan to address AMR in a coordinated manner. The importance of collaboration between the public and private sectors in combating AMR.
- The role of regulatory bodies in enforcing infection control standards and promoting rational antibiotic use. The need for public awareness campaigns to educate the community about infection prevention and the dangers of antibiotic misuse.

- The importance of addressing the social determinants of health that contribute to the spread of infections and the development of AMR. The potential for global collaboration to address the challenge of AMR, which is a global threat.
- The need for continued investment in research and development of new antibiotics, diagnostics, and infection control technologies. The importance of a "One Health" approach that recognizes the interconnectedness of human, animal, and environmental health in addressing AMR.

IV. Inauguration ceremony

The next was the formal Inauguration ceremony and lamp lighting on the **25th Annual EDPA Conference.** The Session coordinators were **Dr Swathi Jami** and **Dr Pankaj Chaudhary.**

A ceremonial lamp lighting by the Past Presidents and executive members added a traditional touch to the inaugural proceedings.

Distinguished guests of honour graced the occasion, including:

- **Dr. Vinay Agarwal**, Former National President, Indian Medical Association (IMA) and Founder Member of IMA-East Delhi Branch.
- **Dr. Ashok Seth**, Eminent Cardiologist, Chairman of Fortis Escorts Heart Institute
- **Dr. R.K. Singhal**, Senior Director & HOD, Internal Medicine, BLK-Max Super Speciality Hospital
- **Dr. Sandeep Guleria**, Senior Consultant Surgeon in General Surgery, GI Surgery & Transplantation Indraprastha Apollo Hospital, Delhi
- **Dr. Raka Guleria**, Director, Obstetrics & Gynaecology, Fortis La Femme
- **Dr. Rajiv Parakh**, Chairman, Peripheral Vascular and Endovascular Sciences, Medanta
- **Dr. S.K. Sarin** (virtual message), Eminent Gastroenterologist and Hepatologist, Director, Institute of Liver and Biliary Sciences,
- **Dr. Dinesh Khullar** (Could not physically join due to personal exigency)- Chairman of Nephrology at Max Hospital, Saket

The honoured guests shared their valuable insights on the evolving role of academic associations and applauded EDPA for its dedicated contributions to medical practice over the past 25 years.


EDPAC ON


EDPAC ON


16:40
EAST DELHI PHYSICIANS' ASSOCIATION (EDPA)
ANNUAL CONFERENCE
EDPAC ON
EDPA CON 2024
CELEBRATING 25 YEARS

V. Smt. Bela Devi Oration

Session Coordinator: *Dr Swathi Jami (EDPA secretary); Dr Vijay Arora, Dr Ahok Grover (Senior EDPA Members)*



12:30 pm - 1:00 pm	SMT BELA DEVI MEMORIAL ORATION		
	Internal Medicine and Rheumatology- it takes two to tango!	Dr Prof. Rohini Handa	Executive Committee

Inauguration ceremony was followed by Smt Bela Devi Oration.

Background:

The **Shrimati Bela Devi Memorial Oration** was established in 2000 by Dr. Saroj K. Prakash, a senior EDPA member, to honor her late mother. Shrimati Bela Devi, originally from Khurja, moved to Shahdara in the 1920s, a time when the town lacked proper health facilities and education for girls. Despite being minimally educated herself, she championed girls' education, taking the bold step of sending her 10-year-old daughter to Delhi by train for schooling, defying financial and social challenges. In 1942, the family moved to Delhi amidst the hardships of World War II and the independence movement. Undeterred, Bela Devi ensured all her seven daughters and one son received equal education, even

sending her daughters overseas for higher studies. A visionary far ahead of her time, she exemplified the values of gender equality and the transformative power of education.

2024 year's EDPACON oration was delivered by eminent Rheumatologist Dr. (Prof.) Rohini Handa. Dr Handa is an renowned rheumatologist with over 30 years of experience, and who has made exceptional contributions to the field of medicine. A former Professor of Medicine at AIIMS, New Delhi, he currently practices at Indraprastha Apollo Hospitals, New Delhi, where he continues to deliver world-class care in rheumatology.

Dr. Handa completed his MBBS in 1982 and MD in 1986, earning numerous prestigious fellowships, including Fellow of the Royal College of Physicians (Glasgow), Fellow of the American College of Rheumatology, Fellow of the National Academy of Medical Sciences (India), and Fellow of the Indian College of Physicians, among others.

As a founding fellow and life member of multiple prestigious societies, including the Indian Rheumatology Association, Delhi Rheumatology Association, and the Geriatric Society of India,

Dr.Handa remains dedicated to advancing medical science and mentoring future generations. His unwavering commitment and extraordinary achievements have established him as a leading figure in the field of rheumatology, inspiring colleagues and students alike.

The prestigious *Smt. Bela Devi Oration* witnessed a thought-provoking address by him. His lecture, titled *"Internal Medicine and Rheumatology: It Takes Two to Tango,"* underscored the intrinsic interdependence between these two medical disciplines.

Dr. Handa eloquently highlighted the vital symbiosis between internal medicine and rheumatology, drawing attention to how these fields complement and enhance one another. He emphasized that while internal medicine provides the foundational understanding and diagnostic framework for systemic illnesses, rheumatology offers focused expertise in autoimmune and musculoskeletal conditions. Together, they ensure comprehensive patient care, addressing intricate conditions that often span both domains.

He further elaborated on the necessity of collaboration in achieving optimal outcomes for patients. Through insightful examples, he demonstrated how rheumatological disorders often present as complex, multi-system diseases that require the meticulous evaluation and intervention of internal medicine specialists. Conversely, rheumatologists rely on the broad medical acumen of internal medicine to refine their approaches and deliver precision care.

The talk also served as a reminder of the evolving landscape of medicine, where the integration of specialties is paramount for advancing clinical outcomes. Dr. Handa's passion for the subject resonated with the audience, inspiring deeper appreciation for teamwork and collaboration in medical practice.

In conclusion, his powerful analogy—*"It takes two to tango"*—aptly illustrated the harmonious partnership between internal medicine and rheumatology, reinforcing the need for continued synergy in the practice of medicine.

VI. Medicolegal session

1:45 pm - 2:05 pm	MEDICOLEGAL SESSION Session Coordinator: Dr Gaurav Agarwal		
	Legal issues in Medical Practice, "Current Perspective"	Dr Girish Tyagi	Dr S K Aggarwal Dr Sushil Tyagi Dr V K Gupta

Immediate Post lunch session was the medicolegal session **. Session Coordinator was** Dr G**aurav Agarwal, Senior EDPA member and medicolegal expert.**

The lecture was originally to be delivered by Dr Girish Tyagi, President DMA, however due to unavoidable circumstances, Dr Girish could not join the meeting. Instead, Dr Gaurav , our EDPA Medicolegal Expert, who was the Session coordinator took over the podium and made it into am interactive session with the audience and answered queries on various aspects related to the legal issues in Medial Practice.

The medicolegal discussion, emphasized the importance of ethical and responsible medical practice. It highlighted the need for clear communication with patients and their families . It also underscored the doctors' duty to uphold the law and protect themselves from potential legal liabilities.

Speaker :
Dr Gaurav Agarwal, MD
Forensic and Medicolegal Expert

Topic:
Legal Issues in Medial Practice- current perspective

Chairpersons:
Dr SK Agarwal, Dr Sushi Tyagi, Dr VK Gupta

Key Points of the interactive discussion on "Legal Issues in Medical Practice, Current Perspective" by Dr. Gaurav Agarwal:

1. **Increased Medico-Legal Awareness and Litigation:**

Patients are increasingly aware of their rights and are more likely to file complaints against doctors.

- Doctors may face complaints filed with multiple authorities (e.g., consumer forum, medical council, police) for the same incident, requiring separate responses to each.

2. Handling "Brought Dead" Cases:

- Legal Requirement: If there is any suspicion of foul play or if the cause of death is unclear, doctors are legally obligated to make a Medico-Legal Case (MLC) and inform the police.
- Doctor's Duty: It is the doctor's responsibility to make the MLC, even if the patient's relatives object. The doctor's assessment of suspicion is paramount, not the patient's wishes.
- MLC Documentation: In a clinic setting, a doctor can simply write "Medico-Legal Case" in bold on their prescription pad. This serves as sufficient documentation. A formal MLC form is not required at the clinic level.

- Informing the Police: Informing the police is the crucial step. The police will then handle further procedures.
- Informing Relatives: Inform the relatives after informing the police.
- Verbal Referrals: Even if a doctor verbally advises the relatives to take a "brought dead" patient to a hospital without any documentation, they are still liable to make an MLC and inform the police. Delayed MLC: An MLC can be made even after a delay. It is not a violation of the law to make a late MLC.

3. Death Certificates:

- Doctor's Responsibility: If a doctor has examined a deceased patient (either brought dead or seen at home) and is reasonably certain of the cause of death, they are legally obligated to issue a death certificate.

- Cause of Death: The cause of death should be clearly stated on the certificate. Avoid vague terms like "cardiorespiratory arrest."
- Suspicious Circumstances: If there is any doubt about the cause of death, an MLC should be made.

4. Home Visits:

- Doctor's Discretion: Doctors are generally advised to avoid home visits due to the legal complexities and potential for difficult situations.
- If a Home Visit is Made: If a doctor does choose to make a home visit and finds the patient deceased, they are legally required to issue a death certificate if the cause of death is known. They cannot simply refer the patient to a hospital for a death certificate.

5. Teleconsultations:

- Doctor's Right to Refuse: Doctors can refuse to provide teleconsultation if they feel that a physical examination is necessary. They are not obligated to continue or initiate a teleconsultation if they deem it inappropriate.
- Legality: Teleconsultations are legal and permissible, provided they are conducted responsibly.

6. New Criminal Laws (BNS - Bharatiya Nyaya Sanhita):

- Section 106(1) BNS (previously 304A IPC): Deals with causing death by negligence.
- Punishment for Doctors: For allopathic doctors, the punishment remains the same as before (up to 2 years imprisonment and a fine). The fine is mandatory, but the imprisonment is not. For Ayush doctors, it is more severe.
- Arrest Procedure: The Jacob Matthew judgment still applies. This means that an inquiry by a board of doctors from a government hospital is required before a doctor can be arrested for alleged negligence.
- Bailable Offense: The offense is bailable, meaning that a doctor can be released on bail from the police station itself.

7. Key Recommendations:

- Err on the Side of Caution: When in doubt, it is always safer to make an MLC and inform the police.

- Document Everything: Maintain clear and accurate medical records, including any communication with patients or their relatives.
- Stay Updated: Keep abreast of the latest laws and guidelines related to medical practice.
- Jacob Matthew Judgment: Keep a copy of the Jacob Matthew judgment readily available.
- Avoid Home Visits: If possible, avoid home visits to minimize legal risks.
- Refuse Teleconsultation if Necessary: If a physical examination is needed, do not hesitate to refuse a teleconsultation.
- Be Aware of the New Laws: Familiarize yourself with the provisions of the Bharatiya Nyaya Sanhita (BNS) and the Bharatiya Nagarik Suraksha Sanhita (BNSS).
- Seek Legal Counsel: If faced with a medico-legal issue, consult with a lawyer specializing in medical law.

VII. Symposium on Obesity & the role of GLP/GIP RA

The next session was a Symposium on Obesity and the role of GLP/GIP analogues. It included a series of talks by eminent speakers as below. Session coordinators were **Dr Anirudh Lochan** and **Dr Himanshu Sharma**, our young and dynamic members of EDPA.

Session Coordinators:

Dr Anirudh Lochan
Consultant Physician and Chest Specialist,
EDPA member

Dr Himanshu Sharma,
DM Endocrinology, Max Vaishali
EDPA member

2:05 pm - 3:35 pm	SYMPOSIUM ON OBESITY & GIP/GLP 1 RA Session Coordinators: Dr Anirudh LochanDr Himanshu Sharma		
2:05 pm - 2:20 pm	**Adiposopathy and the Medusa Paradox**	Dr Vivek Bindal	Dr Rajeev Lochan Dr Saurabh Srivastava Dr R M Chhabra
2:20 pm - 2:35 pm	**Tirzepatide: A Novel GIP+GLP1 Analogue**	Dr Manoj Chawla	Dr Rajiv Gupta Dr Meenakshi Jain Dr MPS Chawla
2:35 pm - 2:55 pm	**SURMOUNT-ing Obesity with Tirzepatide-SURMOUNT 1 & 4**	Dr Supratik Bhattacharya	Dr Naresh Dang Dr Ashok Grover Dr S Chakravorty
2:55 pm - 3:05 pm	**Panel Discussion**	**Panelists:** Dr Vivek Bindal Dr Manoj Chawla Dr Supratik Bhattacharya	
3:05 pm - 3:35 pm	**Efficacy of DPP4i-A case based approach** **Moderator: Dr Rakesh Kumar Prasad**	Dr Rajeev Chawla	Dr Lalit Dr Navin Atal Dr Roli Bansal

1. Adiposopathy and the Medusa paradox

The first talk in this symposium was by Dr Vivek Bindal, a well-known bariatric surgeon. Dr Bindal has a Fellowship in Robotic GI and Bariatric Surgery, from University of Illinois at Chicago and is an Ex-faculty member, Duke University, USA. He has been conferred International Scholar Award by American College of Surgeons jn Washington DC. He is also the President elect, Society for Surgery of Alimentary Tract (India); Secretary, Association of Robotic Innovative Surgeons; Joint Secretary, Obesity Surgery Society of India; Associate editor, Journal of Bariatric Surgery and Sectional Editor, Journal of Minimal access Surgery.

Speaker :
Dr Vivel Bindal
Head of Department, Institute of Minimal Access, Bariatric & Robotic Surgery, Max Super Specialty Hospitals, Vaishali, Patparganj, Noida.

Topic:
Adiposopathy and the Medusa paradox

Chairpersons:
Dr Rajeev Lochan, Dr Saurabh Srivastava, Dr RM Chhabra

Dr. Bindal's lecture on Adiposopathy and the Medusa paradox, provided a detailed overview of the pathophysiology of obesity, emphasizing the role of adipocyte dysfunction and the challenges of weight management. He highlighted the need for a paradigm shift in how we approach obesity, moving from a simplistic focus on calories in/calories out to a more nuanced understanding of the complex interplay of genetic, environmental, and physiological factors. The lecture underscored the importance of individualized treatment plans, realistic goal setting, and long-term support for achieving sustainable weight loss and improving overall health.

Key Points from Dr. Vivek Bindal's Lecture:

1. Obesity: A Growing Epidemic:

- Obesity is a significant and rapidly growing health problem worldwide, including in India. It is a chronic, relapsing, and progressive disease. The rise in obesity is outpacing changes in lifestyle, suggesting other contributing factors.

2. Adipose Tissue Dysfunction:

- Adipose tissue is not just a passive storage depot for fat; it is an active endocrine organ. Adiposopathy refers to the dysfunction of adipose tissue, which plays a crucial role in the development of obesity-related complications.

- Ectopic fat deposition (fat accumulation in organs like the liver, heart, pancreas, and kidneys) is particularly harmful. Visceral fat (intra-abdominal fat) is more metabolically active and pro-inflammatory than subcutaneous fat.
- Indians have a genetic predisposition for higher visceral fat and lower subcutaneous fat storage capacity, making them more susceptible to metabolic complications even at a lower BMI ("normal weight obesity").

3. Mechanisms of Adipocyte Dysfunction:

- In obesity, adipocytes increase in size (hypertrophy) and number (hyperplasia). Overloaded adipocytes lead to mitochondrial dysfunction, increased production of reactive oxygen species (ROS), and release of pro-inflammatory adipocytokines.
- This chronic inflammation contributes to insulin resistance, dyslipidemia, and other metabolic disturbances.

4. The Energy Balance Equation:

- External Influences:
    - Increased availability of cheap, calorie-dense, processed foods.
    - Psychosocial environment and attitudes towards weight and health.
- Internal Influences:
    - Hypothalamic-pituitary-adrenal (HPA) axis dysregulation.
    - Genetic predisposition.
    - Gut microbiota.
    - Endocrine factors (e.g., cortisol, gonadal hormones).

5. Obesity-Related Complications:

- Type 2 diabetes.
- Cardiovascular disease (hypertension, dyslipidemia, coronary artery disease, stroke).
- Nonalcoholic fatty liver disease (NAFLD).
- Sleep apnea.
- Osteoarthritis.
- Certain cancers (e.g., breast, endometrial, colon).
- Gallstones.

6. The Concept of "Set Point" and Weight Regain:

- The body has a "set point" for weight or fat mass that it tries to maintain.
- Weight loss triggers physiological adaptations that promote weight regain:
    - Increased hunger and decreased satiety (due to changes in gut hormones like ghrelin, GLP-1, etc.)
    - Decreased resting energy expenditure (adaptive thermogenesis).
- This creates a "physiological storm" that makes it difficult to maintain weight loss.

7. Treatment Strategies:

- Lifestyle Modification: Diet and exercise remain the cornerstone of obesity management but are often insufficient alone.
- Pharmacotherapy: Medications can help to address the physiological drivers of weight regain.
- Bariatric Surgery: Considered for patients with severe obesity or those who have failed other interventions.
- Realistic Targets: Setting achievable and sustainable weight loss goals is crucial.
- Continuous Motivation and Support: Long-term success requires ongoing support from healthcare professionals and support systems.

8. The "TACTICS" Approach to Resetting the Metabolic Set Point:

- Talk about realistic goals and targets. Assess aetiology, risk factors, and complications. Craft an appropriate management strategy.
- Titrate doses slowly and interchange treatments if needed.
- Incorporate combination therapy if necessary. Continuous motivation and support. Smart troubleshooting.

9. Key Takeaways:

- Adiposopathy, or dysfunctional adipose tissue, is a central player in the pathogenesis of obesity-related complications.
- Weight loss is challenging due to the body's compensatory mechanisms that defend the "set point."
- A comprehensive, multidisciplinary approach is needed to address the complex interplay of factors contributing to obesity.
- Newer pharmacotherapies and surgical options offer hope for achieving and maintaining significant weight loss.
- Long-term success requires sustained lifestyle changes, ongoing support, and realistic expectations.

The Medusa Paradox :

- The paradox likely refers to the multifaceted nature of obesity and its complications, similar to the mythical Medusa with multiple snake heads.
- Treating one aspect of obesity (e.g., weight loss) may not address all the underlying metabolic derangements and associated health risks.
- A comprehensive approach targeting multiple pathways is needed to effectively manage obesity and its "snake heads" of complications.

2. Tirzepatide: A novel GIP/GLP1 analogue

The next talk in this session was by **Dr Manoj Chawla**, a well-known Diabetologist from Mumbai. He was recently awarded the `Best Consultant Diabetologist in Mumbai` Award, in appreciation of his excellence in the field of Diabetes. Dr. Chawla has co-authored and presented research papers at various national and international symposia. He has been the Principal Investigator for various global clinical trials for new antidiabetic drugs and his special interest areas are CGMS and Insulin Pumps.

His talk was on **Tirzepatide: a novel GIP/GLP1 analogue** . Dr. Chawla's lecture provides a comprehensive and enthusiastic overview of tirzepatide, highlighting its unique mechanism of action, clinical efficacy, and safety profile. He positions tirzepatide as a potential game-changer in the management of type 2 diabetes and obesity, offering a new and powerful tool for clinicians to address these growing global health challenges.

Speaker :
Dr Manoj Chawla
Consultant Diabetologist, S L Raheja Fortis Hospital, Mumbai
Director and Consultant Diabetologist at Lina Diabetes Care & Mumbai Diabetes Research Centre

Topic:
Tirzepatide: A novel GIP/GLP1 analogue

Chairpersons:
Dr Rajeev Gupta, Dr Meenakshi Jain, DR MPS Chawla

Key Points from Dr. Manoj Chawla's Lecture: "Tirzepatide: A Novel GIP + GLP-1 Analogue":

1. Introduction to Tirzepatide (Mounjaro):

- Tirzepatide is a novel, first-in-class, once-weekly dual glucose-dependent insulinotropic polypeptide (GIP) and glucagon-like peptide-1 (GLP-1) receptor agonist. It is a single molecule designed to activate both GIP and GLP-1 receptors.
- It is based on the native GIP sequence but has modifications to prolong its half-life and enhance its activity. It has a half-life of approximately 5 days, allowing for once-weekly dosing. No dose adjustment is needed for patients with renal or hepatic impairment.

2. Mechanism of Action:

- GIP Activity:
    - ✓ Reduces food intake (centrally).
    - ✓ Decreases nausea (potentially counteracting the nausea caused by GLP-1).
    - ✓ Improves insulin sensitivity in adipose tissue.
    - ✓ Increases lipid buffering and storage in adipose tissue.

- ✓ Increases blood flow to adipose tissue.
- ✓ Reduces pro-inflammatory immune cell infiltration in adipose tissue.
- ✓ Increases insulin secretion from the pancreas.
- ✓ May increase glucagon secretion, but in a glucose-dependent manner (only during hypoglycemia).

- GLP-1 Activity:
  - ✓ Reduces food intake (centrally).
  - ✓ Increases satiety.
  - ✓ Increases insulin secretion from the pancreas.
  - ✓ Suppresses glucagon secretion.
  - ✓ Delays gastric emptying.

- Combined Effects:
  - ✓ Improved glycemic control (reduced HbA1c).
  - ✓ Weight reduction.
  - ✓ Improved lipid profile.
  - ✓ Potential cardiorenal benefits.

3. Clinical Evidence (SURPASS Program):

- The SURPASS clinical trial program evaluated the efficacy and safety of tirzepatide in patients with type 2 diabetes.
- SURPASS-1: Compared tirzepatide to placebo.
- SURPASS-2: Compared tirzepatide to semaglutide (a GLP-1 RA).
- SURPASS-3: Compared tirzepatide to insulin degludec.
- SURPASS-4: Compared tirzepatide to insulin glargine.
- SURPASS-5: Compared tirzepatide to placebo as an add-on to insulin glargine.

Key Findings:

- Tirzepatide demonstrated significant reductions in HbA1c (2.0-2.6%) across all trials, superior to placebo and active comparators. It improved beta-cell function and insulin sensitivity.
- It showed intact glucagon response to induced hypoglycemia. It led to significant weight loss (up to 22.5% or 26 kg in the SURMOUNT-1 trial, which included patients with obesity but without diabetes).
- It improved body composition, with significant reductions in total fat mass and visceral fat. It did not decrease the sleeping metabolic rate.
- It reduced cravings for sweets, carbohydrates, starches, and fast foods. It improved lipid profiles (reduced triglycerides, total cholesterol, LDL cholesterol, VLDL cholesterol, and increased HDL cholesterol).
- It reduced systolic and diastolic blood pressure. It did not increase the risk of major adverse cardiovascular events (MACE) in the SURPASS program (results of the dedicated cardiovascular outcomes trial, SURPASS-CVOT, are awaited).

4. Safety and Tolerability:

- The most common side effects were gastrointestinal (nausea, diarrhea, vomiting), typically mild to moderate and occurring during the dose escalation phase.
- There was a low incidence of hypoglycemia. No increased risk of pancreatitis or medullary thyroid carcinoma was observed in the clinical trials.

5. Practical Considerations:

- Tirzepatide is administered as a once-weekly subcutaneous injection. The starting dose is 2.5 mg, which is gradually titrated up to a maximum tolerated dose of 15 mg. The optimal dose for most patients is likely to be between 10-15 mg weekly.

- *It has just been approved in India (March 2025) and is now available in India. The cost is likely to be a significant factor in its widespread adoption*.

6. Key Takeaways:

- Tirzepatide is a promising new agent for the treatment of type 2 diabetes and obesity. It offers a unique dual mechanism of action, targeting both GIP and GLP-1 pathways.
- It demonstrates significant efficacy in improving glycemic control, reducing weight, and improving cardiometabolic parameters. It has a favorable safety and tolerability profile.
- It has the potential to be a major advancement in the management of these conditions.

Additional Points:

- Dr. Chawla highlighted the importance of addressing multiple aspects of diabetes and obesity, not just focusing on glucose control alone. He emphasized the need for individualized treatment plans based on patient characteristics and preferences.
- He discussed the potential for tirzepatide to be used in combination with other antidiabetic agents. He acknowledged the limitations of current data (e.g., lack of long-term cardiovascular outcomes data) and the need for ongoing research.
- He anticipated that tirzepatide will be a valuable addition to the armamentarium of treatments for type 2 diabetes and obesity. The ongoing SURPASS-CVOT trial will provide more definitive data on the cardiovascular safety and efficacy of tirzepatide.
- The potential for tirzepatide to be used in other conditions, such as nonalcoholic steatohepatitis (NASH), is being investigated. The development of other dual and triple incretin agonists is underway, suggesting a future trend towards combination therapies targeting multiple pathways.
- The need for healthcare professionals to stay updated on the latest advances in diabetes and obesity management. The importance of patient education and engagement in shared decision-making to optimize treatment outcomes.
- The role of lifestyle modifications, including diet and exercise, in conjunction with pharmacotherapy. The need to address the social and economic barriers to accessing new and effective treatments. The potential for public health initiatives to promote awareness about obesity and diabetes and to encourage early intervention. The importance of a collaborative approach involving physicians, nurses, dietitians, pharmacists, and other healthcare professionals in managing these complex conditions.

3. SURMOUNT-ing Obesity with Tirzepatide - SURMOUNT-1 & 4

The third talk in this symposium was by **Dr Supratik Bhattacharya** , a distinguished endocrinologist and Directo at SKN Diabetes & Endocrine Centre, Kolkata, and Consultant, Manipal Broadways Hospital & Apollo Sugar, Kolkata.

He gave a talk on evidence-based treatment of obesity with latest GLP1 RA, Tirzepatide (Mounjaro, by Eli Lily). He provided a detailed overview of the SURMOUNT-1 and SURMOUNT-4 trials, highlighting the impressive efficacy and safety of tirzepatide for weight management. He emphasized the potential of this novel agent to significantly impact the lives of individuals with obesity and to address the growing global burden of this chronic disease.

Speaker :
Dr. Supratik Bhattacharya
Director, SKN Diabetes and Endocrine Centre, Kolkata
Consultant, Manipal Broadways Hospital & Apollo Sugar, Kolkata

Topic:
SURMOUNT-ing Obesity with Tirzepatide - SURMOUNT-1 & 4"

Chairpersons:
Dr Naresh Dang, Dr Ashok Grover, Dr Chakravorty

Key Points from Dr. Supratik Bhattacharya's Lecture: "SURMOUNT-ing Obesity with Tirzepatide - SURMOUNT-1 & 4":

1. Introduction to the SURMOUNT Clinical Trial Program:

- The SURMOUNT program is a series of clinical trials evaluating the efficacy and safety of tirzepatide (Mounjaro) for chronic weight management in individuals with overweight or obesity, with or without type 2 diabetes.
- SURMOUNT-1: Focused on individuals with obesity or overweight with at least one weight-related comorbidity, excluding type 2 diabetes.
- SURMOUNT-2, 3: Included patients with type 2 diabetes.
- SURMOUNT-4: Investigated the effects of continued tirzepatide treatment versus withdrawal (switching to placebo) after an initial 36-week open-label lead-in period.
- SURMOUNT-5: An ongoing trial.

2. Tirzepatide (Mounjaro): A Dual GIP/GLP-1 Receptor Agonist:

- Tirzepatide is a first-in-class, once-weekly injectable medication that activates both the glucose-dependent insulinotropic polypeptide (GIP) and glucagon-like peptide-1 (GLP-1) receptors.
- It is based on the GIP backbone with modifications for prolonged action. It has a half-life of ~5 days, allowing for once-weekly administration. No dose adjustment is required for renal or hepatic impairment.

3. Mechanisms of Action in Weight Management:

- Central Effects (Brain): Reduces appetite and food intake, increases satiety.
- Adipose Tissue: Increases insulin sensitivity, improves lipid buffering and storage capacity, reduces inflammation.
- Pancreas: Increases insulin secretion, regulates glucagon secretion (increases glucagon in a glucose-dependent manner, counterbalanced by GLP-1's glucagon-suppressing effect).
- Stomach: Delays gastric emptying (primarily GLP-1 effect).

4. SURMOUNT-1 Trial: Key Findings:

- Study Design:
    - Randomized, double-blind, placebo-controlled trial.
    - 2,539 adults with BMI ≥ 30 kg/m² or BMI ≥ 27 kg/m² with at least one weight-related complication (excluding diabetes).
    - Participants received tirzepatide (5 mg, 10 mg, or 15 mg) or placebo once weekly for 72 weeks, in addition to lifestyle intervention.
- Primary Endpoints:
    - Percentage change in body weight from baseline at week 72.
    - Proportion of participants achieving ≥ 5% weight reduction at week 72.
- Results:
    - Tirzepatide resulted in substantial and sustained weight reduction compared to placebo.
        - 5 mg: 16.0% weight loss.
        - 10 mg: 21.4% weight loss.
        - 15 mg: 22.5% weight loss (average of 23.6 kg).
    - A high proportion of participants achieved clinically meaningful weight loss thresholds:
        - ≥ 5% weight loss: 89-91% with tirzepatide vs. 35% with placebo.
        - ≥ 10% weight loss: 70-75% with tirzepatide vs. 19% with placebo.
        - ≥ 15% weight loss: 53-63% with tirzepatide vs. 9% with placebo.
        - ≥ 20% weight loss: 36-40% with tirzepatide vs. 3% with placebo.
    - 4 out of 10 patients lost 25% of weight

Significant improvements in body composition:

- Reduction in total fat mass and visceral fat mass. Relatively smaller reduction in lean mass.
- Significant improvements in cardiometabolic risk factors:

- Waist circumference reduction (average of 19.9 cm with 15 mg). Reduced systolic and diastolic blood pressure. Improved lipid profile (reduced triglycerides, LDL-C, increased HDL-C). Reduced fasting insulin levels. Improved physical functioning and health-related quality of life.

- Safety:
    - The most common adverse events were gastrointestinal (nausea, diarrhea, constipation, vomiting), mostly mild to moderate and occurring during dose escalation.
    - Discontinuation rates due to adverse events were relatively low.
    - No major safety concerns regarding pancreatitis or malignancy.

5. SURMOUNT-4 Trial: Key Findings:

- Study Design:
    - 36-week open-label lead-in period with tirzepatide (up to 10 mg or 15 mg).
    - 52-week double-blind period: Participants were randomized to continue tirzepatide or switch to placebo.

- Results:
    - Continued tirzepatide treatment led to further weight loss and maintenance of weight loss achieved during the lead-in period.
    - Total weight loss from week 0 to week 88: 26.0%. Switching to placebo resulted in significant weight regain (+14.8% from randomization), but not back to baseline.
    - Weight loss from week 0 to week 88: -9.5%
    - Waist circumference changes mirrored the weight changes.
    - Safety profile was consistent with previous trials.

6. Implications for Clinical Practice:

- Tirzepatide is a highly effective agent for weight management in individuals with overweight or obesity.
- It can lead to substantial and sustained weight loss, approaching that achieved with bariatric surgery. It improves cardiometabolic risk factors and quality of life. It should be used in conjunction with lifestyle modifications (diet and exercise).
- Dosing should be individualized, starting at 2.5 mg weekly and gradually titrated to the maximum tolerated dose (up to 15 mg).

7. Future Directions:

- Longer-term data on weight maintenance and cardiovascular outcomes are needed.
- Studies in specific populations (e.g., different ethnicities, adolescents) are ongoing. The role of tirzepatide in combination with other weight-loss therapies is being explored.

Key Takeaways:

- Tirzepatide represents a significant advance in the pharmacotherapy of obesity.

- The SURMOUNT trials demonstrate its efficacy and safety in promoting substantial weight loss and improving cardiometabolic health.
- It offers a new and powerful tool for clinicians to help patients achieve and maintain a healthy weight. The findings from SURMOUNT-4 highlight the importance of continued treatment to maintain weight loss.
- Further research is ongoing to explore the full potential of tirzepatide in various populations and clinical settings. The potential for tirzepatide to be used in combination with other therapies, including behavioral interventions and other medications.
- The need for healthcare professionals to be knowledgeable about the benefits and risks of tirzepatide and to counsel patients appropriately. The importance of addressing the underlying drivers of obesity, including genetic, environmental, and behavioral factors.
- The role of public health policies in promoting healthy lifestyles and preventing obesity. The need for continued innovation and research to develop even more effective and accessible treatments for obesity.
- The importance of a patient-centered approach to obesity management, taking into account individual preferences, goals, and values. The potential for tirzepatide to transform the lives of millions of people living with obesity and its associated complications.
- The need for a shift in societal attitudes towards obesity, recognizing it as a chronic disease that requires ongoing management. The importance of addressing the stigma and discrimination faced by individuals with obesity.
- The potential for early intervention with tirzepatide to prevent the development of obesity-related complications. The role of healthcare systems in providing comprehensive and integrated care for individuals with obesity. The need for continued advocacy to ensure access to effective obesity treatments for all who need them.

4. Panel Discussion: Obesity management - evidence from clinical trials

The talks were followed by a panel discussion on Adiposopathy, Obesity, Tirzepatide, and its evidence from clinical trials.

:

Moderator:
Dr Himanshu Sharma, DM Endo,
Max PPG, EDPA member

Panellists:

Dr. Supratik Bhattacharya
Director, SKN Diabetes and Endocrine Centre, Kolkata
Consultant, Manipal Broadways Hospital & Apollo Sugar, Kolkata

Dr Manoj Chawla
Consultant Diabetologist, S L Raheja Fortis Hospital, Mumbai
Director and Consultant Diabetologist at Lina Diabetes Care & Mumbai Diabetes Research Centre

Dr Vivel Bindal
Head of Department, Institute of Minimal Access, Bariatric & Robotic Surgery, Max Super Specialty Hospitals, Vaishali, Patparganj, Noida.

The panel discussion provided a balanced perspective on the potential benefits and limitations of tirzepatide in the management of obesity. The panellists highlighted the need for careful patient selection, individualized treatment plans, and ongoing monitoring. They also emphasized the importance of addressing the broader context of obesity, including lifestyle factors, comorbidities, and access to care. The discussion underscored the rapidly evolving landscape of obesity pharmacotherapy and the promise of new agents like tirzepatide to transform the lives of individuals with this chronic disease.

Key Points from the Panel Discussion :

1. Comparison of Tirzepatide with Bariatric Surgery and Other Interventions:

- Dr. Bindal (Bariatric Surgeon): Acknowledged that tirzepatide's weight loss results (approaching 25-30%) are challenging those achieved with bariatric surgery.
- Emphasized that all therapies (lifestyle, drugs, endoscopic procedures, surgery) are complementary and have different indications.
- Noted that bariatric surgeons have been using GLP-1 RAs for over a decade to augment weight loss before and after surgery.
- Expressed satisfaction that effective medical therapies like tirzepatide can help patients achieve their weight loss goals without surgery.

2. Availability and Cost of Tirzepatide in India:

- Tirzepatide is now commercially available in India. Clinical trials with tirzepatide have been conducted in India.
- The cost of tirzepatide is a significant concern, potentially limiting access for many patients. It was acknowledged that insurance coverage for obesity treatment is limited in India.

3. Weight Regain After Stopping Tirzepatide:

- Dr. Chawla: Referred to the SURMOUNT-4 data, which showed that patients who discontinued tirzepatide after 36 weeks regained a significant portion of the lost weight (but not all of it) within the following year.
- Dr. Bhattacharya: Confirmed that weight regain is expected after stopping the drug, emphasizing the chronic nature of obesity.

4. Comparison with Semaglutide:

- Dr. Bhattacharya: Shared his experience as a national lead investigator in clinical trials with both semaglutide and tirzepatide. Suggested that tirzepatide might be better tolerated than semaglutide, with fewer GI side effects. Noted greater weight loss with tirzepatide in his experience.
- Dr. Chawla: Acknowledged that semaglutide has a longer track record and more real-world data.
- Dr. Bhattacharya: Highlighted that semaglutide has shown cardiovascular outcome benefits, while data for tirzepatide (SURPASS-CVOT) are still awaited.
- Dr. Chawla: Pointed out that oral semaglutide is available, while tirzepatide is currently only available as an injectable.
- Dr. Bindal Inquired about a comparison of lean mass reduction between injectable semaglutide and tirzepatide to which Dr. Chawla clarified that there is data showing lean mass reduction with both the drugs but there is no direct comparison.

5. Long-Term Safety and Unknowns:

- The panelists acknowledged the need for long-term data on the safety and efficacy of tirzepatide.
- Dr. Chawla: Emphasized the importance of pharmacovigilance once the drug is available in India.
- Dr. Bindal: Highlighted the need to monitor for potential long-term effects, such as changes in body composition (e.g., sarcopenia) and the risk of pancreatitis or other rare events.

6. Patient Selection and Individualized Treatment:

- The panelists agreed that tirzepatide is not a "one-size-fits-all" solution and that careful patient selection is important.
- Dr. Bhattacharya: Emphasized that the initial motivation and efforts of the patient are crucial for success.
- Dr. Chawla: Highlighted that tirzepatide could be particularly useful for patients who are unable to undergo bariatric surgery or who prefer a non-surgical approach.

7. Other GLP-1 RAs and Future Directions:

- Dr. Chawla: Mentioned the development of other dual and triple incretin agonists, such as retatrutide and survodutide (which also targets the glucagon receptor).
- The panelists anticipated that more options for medical weight management will become available in the future. There was a discussion of a new drug called orforglipron.

8. Key Takeaways:

- Tirzepatide is a highly effective agent for weight loss, with results that approach those seen with bariatric surgery in clinical trials.It also improves glycemic control and other cardiometabolic parameters.
- Cost, availability, and long-term safety data are important considerations.Patient selection, individualized treatment plans, and ongoing monitoring are essential.
- The future of obesity management is likely to involve a combination of lifestyle modifications, pharmacotherapy, and, in some cases, bariatric surgery or endoscopic procedures.

Additional Points:

- The panelists discussed the importance of addressing the underlying drivers of obesity, including genetic, environmental, and behavioral factors.
- They highlighted the need for a multidisciplinary approach to obesity management, involving physicians, dietitians, psychologists, and other healthcare professionals.
- They emphasized the importance of patient education and engagement in shared decision-making. They acknowledged the limitations of current data and the need for ongoing research to optimize the use of tirzepatide and other emerging therapies.

5. Panel Efficacy of DPP4i: a case-based approach

The last talk in this session was on Efficacy of DPP4i – a case-based approach by Dr Rajeev Chawla, a **Senior Diabetologist & Director at North Delhi Diabetes Centre, New Delhi**. Dr. Chawla's lecture provided a practical, case-based overview of the role of DPP4i /sitagliptin in the management of type 2 diabetes.

He highlighted the drug's efficacy, safety, and versatility, positioning it as a valuable option for a wide range of patients. The lecture emphasized the importance of early and sustained glycemic control to prevent long-term complications and the need for a comprehensive approach to diabetes care that addresses not only glucose but also weight, cardiovascular risk factors, and overall patient well-being.

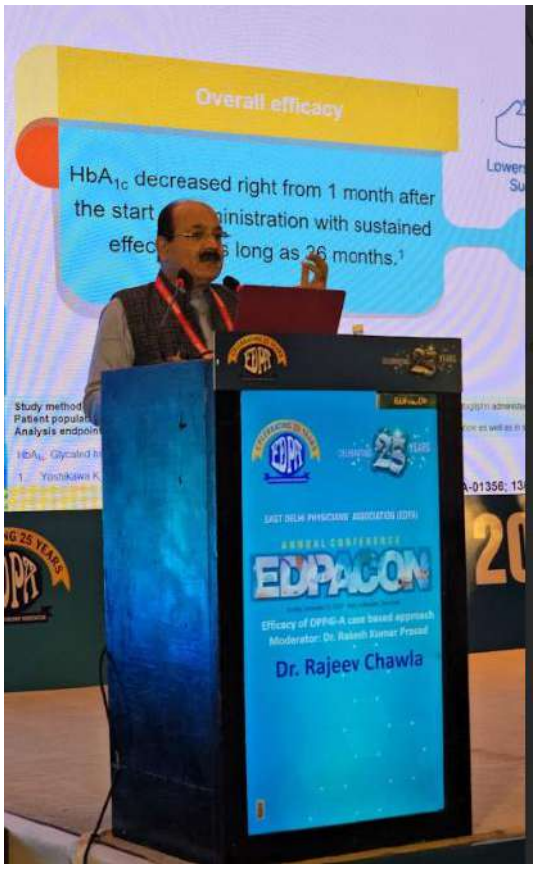
Speaker :
Dr Rajeev Chawla
MD, FRCP Edin (UK), FRSSDI, FACR, FACE(USA)
Senior Diabetologist & Director at North Delhi Diabetes Centre, New Delhi

Chairpersons:
Dr Lalit, Dr Navin Atal, Dr Roli Bansal

Key Points from Dr. Rajeev Chawla's talk on DPP4 inhibitors (focusing on Sitagliptin):

1. Diabetes and its Complications:

- Poor glycemic control in type 2 diabetes leads to both microvascular (retinopathy, nephropathy, neuropathy) and macrovascular (coronary artery disease, stroke, peripheral vascular disease) complications.
- Recent evidence suggests that poor glycemic control is also associated with increased risk of malignancies, infections, non-alcoholic fatty liver disease (NAFLD)/NASH, and functional/cognitive disabilities.
- Early and sustained glycemic control is crucial for preventing or delaying these complications.



2. Limitations of Traditional Therapies:

- Metformin and sulfonylureas are often insufficient to achieve and maintain glycemic targets in the long term. Sulfonylureas are associated with hypoglycemia and weight gain.

- There's a need for therapies that effectively lower glucose without causing hypoglycemia or weight gain and have a good safety profile.

3. Role of DPP-4 Inhibitors (DPP4is):

- DPP4is (e.g., sitagliptin) enhance the incretin system by inhibiting the enzyme DPP-4, which degrades GLP-1 and GIP.
- This leads to increased levels of active GLP-1 and GIP, resulting in:
    - Increased insulin secretion (glucose-dependent).
    - Decreased glucagon secretion.
    - Improved postprandial glucose control.
- DPP4is are generally weight-neutral and have a low risk of hypoglycemia.

4. Sitagliptin: A Case-Based Approach:

- Dr. Chawla presented three cases to illustrate the use of sitagliptin in different clinical scenarios.
- Case 1: A 55-year-old male with poorly controlled type 2 diabetes on metformin, glimepiride, and dapagliflozin, with hypertension and albuminuria. Sitagliptin was added to improve glycemic control.
- Case 2: A 38-year-old female with type 2 diabetes for 5 years, on metformin and glimepiride, with BMI of 24 and albuminuria. Sitagliptin was likely added due to its weight-neutral profile and potential renal benefits.
- Case 3: A 45-year-old female with a 12-year history of type 2 diabetes, poorly controlled on metformin, glimepiride, and dapagliflozin, with hypertension, dyslipidemia, and albuminuria. Sitagliptin was added, and a 4-year follow-up showed improved glycemic control and reduction in albuminuria.

5. Clinical Evidence for Sitagliptin:

- Glycemic Efficacy:
    - Studies have shown that sitagliptin, added to metformin, significantly reduces HbA1c, fasting glucose, and postprandial glucose.
    - It improves beta-cell function (as measured by HOMA-B).
    - Long-term studies (up to 6 years) have demonstrated sustained glycemic control with sitagliptin.
    - It shows good results in terms of efficacy and safety compared to SGLT2 inhibitors.
- Renal Effects: Sitagliptin has been shown to reduce albuminuria in patients with type 2 diabetes. It may help preserve eGFR (estimated glomerular filtration rate) over time.
- Cardiovascular Safety: The TECOS trial demonstrated the cardiovascular safety of sitagliptin. It does not increase the risk of heart failure hospitalization.
- Other Benefits:
    - Weight-neutral.
    - Low risk of hypoglycemia.

- Placebo-like tolerability profile.
- Can be used in patients with renal impairment (dose adjustment may be needed).
- Once-daily dosing.

6. Sitagliptin vs. Other DPP4is:

- The lecture primarily focused on sitagliptin, which is considered a "gold standard" DPP4i with a long track record of safety and efficacy. While other DPP4is are available, sitagliptin has the most extensive clinical evidence base.

7. Sitagliptin in Combination Therapy:

- Sitagliptin can be effectively combined with other antidiabetic agents, including metformin, sulfonylureas, SGLT2 inhibitors, and insulin.
- Combining sitagliptin with an SGLT2 inhibitor may offer additional benefits in terms of glycemic control, weight reduction, and reduced risk of urinary tract infections (compared to SGLT2i alone).

8. Long-Term Glycemic Control:

- Early and intensive glycemic control is important for preventing long-term complications. Sitagliptin can help achieve and maintain glycemic targets over the long term.

9. Key Takeaways:

- Sitagliptin is an effective and safe DPP4 inhibitor for the management of type 2 diabetes.
- It offers good glycemic control, is weight-neutral, has a low risk of hypoglycemia, and has demonstrated renal benefits. It can be used as monotherapy or in combination with other antidiabetic agents.
- It is a valuable option for patients with various clinical profiles, including those with renal impairment and the elderly.

Additional Points:

- Dr. Chawla emphasized the importance of moving beyond a glucocentric approach to diabetes management and addressing other cardiovascular risk factors.
- He highlighted the need to overcome clinical inertia and proactively optimize therapy to achieve glycemic targets. He suggests that DPP4is like sitagliptin can be considered a "poor man's GLP-1 RA" due to their ability to enhance incretin action, although they do not provide the same degree of weight loss.
- He mentioned that sitagliptin may have some beneficial effects on lipid profiles and vascular function, although these are not the primary mechanisms of action. He touches upon the concept of glycemic variability and suggests that DPP4is may help reduce it.
- The lecture underscored the importance of individualized treatment decisions based on patient characteristics, comorbidities, and preferences; the role of patient education and engagement in self-management to achieve optimal outcome; the importance of a multidisciplinary approach to diabetes care, involving physicians, nurses, dietitians, and other healthcare professionals.

VIII. Cardiology Session

Session Coordinator:

Dr AK Pandey, Senior Director – Cardiology, Interventional Cardiology Max Vaishali, EDPA member.

The next session was on Cardiology. The first talk in this session was on GDMT of Heart failure by leading Cardiologist **Dr. Upendra Kaul** , followed by a panel discussion on Advances in HF management including ICDs and CRT-D.

3:35 pm - 4:15 pm	CARDIOLOGY SESSION Session Coordinator: Dr Anand Kumar Pandey		
3:35 pm - 3:55 pm	**Heart failure management- What after four pillars of GDMTs?**	Dr Upendra Kaul	Dr Anil Motta Dr Vijay Arora Dr Mukesh Mehra
3:55 pm - 4:15 pm	**Panel Discussion-Advancing heart failure management: Bridging medical therapies with ICDs and CRT-D**	**Panelists :** Dr Vivek Chaturvedi Dr Sandeep Singh Dr Amitabh Yaduvanshi	

Speaker :
Dr. Upendra Kaul
Chairman, Batra Heart Centre, Dean Academics and Research, BHMRC, New Delhi & Adjunct Professor Jamia Hamdard and Amity University. Formerly Prof of Cardiology, AIIMS and Executive Director and Dean Fortis Health Care

Topic:
Heart Failure Management – What after four pillars of GDMTs?

Chairpersons
Dr Anil Motta, Dr Vijay Arora, Dr Mukesh Mehra

1. Heart Failure Management – What after four pillars of GDMTs?

The first talk in Cardiology session was on GDMT of Heart failure by leading Cardiologist **Dr. Upendra Kaul**.

Key Points from Dr. Upendra Kaul's talk on Heart Failure Management Beyond the Four Pillars:

1. **Heart Failure Remains a Challenge**:

- Despite advances in treatment, heart failure continues to have a poor prognosis and is a major clinical challenge.
- Mortality rates remain high, with about 50% of patients dying within five years of diagnosis.
- Frequent hospital readmissions are common, indicating worsening heart failure.

2. **The Four Pillars** of Heart Failure Treatment: Dr. Kaul reiterated the importance of the four established pillars of heart failure with reduced ejection fraction (HFrEF) treatment:

- Beta-blockers: Reduce mortality significantly.
- ACE inhibitors/ARBs/ARNIs: Improve outcomes.
- Mineralocorticoid receptor antagonists (MRAs): Reduce mortality and hospitalizations.
- SGLT2 inhibitors: A more recent addition, shown to improve outcomes.

3. **Gaps in Current Treatment**:

- Despite the proven benefits of these therapies, there are significant gaps in their implementation:
- Only a small percentage of eligible patients receive all four guideline-directed medical therapies (GDMT).
- Even fewer patients are treated with the target doses used in clinical trials.

4. **Worsening Heart Failure**: Worsening heart failure is a critical issue, occurring even in patients on optimal medical therapy. It is characterized by:

- Need for increased diuretic doses (oral or intravenous).
- Frequent hospitalizations or emergency room visits.
- Progressive decline in functional status.

5. **Vericiguat**: A Novel Agent for Worsening Heart Failure:

- Vericiguat is a soluble guanylate cyclase stimulator that acts as a potent vasodilator.
- The VICTORIA trial demonstrated that vericiguat, added to standard therapy, reduced the composite endpoint of cardiovascular death or heart failure hospitalization in patients with worsening HFrEF.
- This reduction was primarily driven by a decrease in heart failure hospitalizations.
- The benefit was seen across various subgroups.
- Vericiguat was generally well-tolerated, with a low incidence of hypotension and syncope.
- Dr. Kaul suggests that vericiguat might become the "fifth pillar" of heart failure treatment, pending the results of the ongoing VICTOR trial.

6. **Cardiac Myosin Activators**:

- Omecamtiv mecarbil is a cardiac myosin activator that improves cardiac contractility without the adverse effects of catecholamines.
- The GALACTIC-HF trial showed a modest reduction in the composite endpoint of cardiovascular death or heart failure events with omecamtiv mecarbil.
- However, the benefit was marginal, and the FDA has not yet approved the drug.
- There was also a slight increase in troponin levels, the clinical significance of which is unclear.
- Danicamtiv is another cardiac myosin activator under investigation.

7. **Hydralazine-Isosorbide Dinitrate Combination**:

- This combination, although older, remains a valuable option in certain patients, particularly:
- Black patients who may not respond as well to ACE inhibitors.
- Patients with contraindications to ACE inhibitors/ARBs/ARNIs (e.g., severe renal dysfunction, hyperkalemia).
- The V-HeFT trial demonstrated a mortality benefit with this combination.

8. **Iron Deficiency in Heart Failure**:

- Iron deficiency is highly prevalent in heart failure patients (up to 80%).
- It is associated with:
- Impaired exercise capacity.
- Reduced quality of life.
- Increased hospitalizations.
- Increased mortality.
- Intravenous iron supplementation (e.g., ferric carboxymaltose) has been shown to: Improve quality of life, Increase exercise capacity, Reduce heart failure hospitalizations (based on meta-analyses). Current guidelines recommend considering intravenous iron in symptomatic HFrEF patients with iron deficiency.

9. **Erythropoietin** in Heart Failure with Anemia and CKD:

- Erythropoietin may be considered in patients with heart failure, anemia, and chronic kidney disease (CKD).
- It can improve hemoglobin levels and exercise tolerance.
- However, it does not improve survival and may increase the risk of thromboembolic events and hypertension.

10. Other Important Points:

- Digitalis: Still has a role in patients with atrial fibrillation and heart failure, and in some end-stage heart failure patients.
- SGLT2 inhibitors: Beneficial in heart failure with preserved ejection fraction (HFpEF) as well as HFrEF.
- De-escalation of therapy: Generally, not recommended if a patient has responded well to GDMT, as it may lead to worsening of heart failure.
- Monitoring: Regular monitoring of potassium, renal function, and blood pressure is crucial in patients on GDMT.

Take-Home Messages:

- Worsening heart failure is a significant unmet need.
- Vericiguat is a promising new agent for worsening HFrEF.
- Don't forget older therapies like hydralazine-isosorbide dinitrate.
- Address iron deficiency, as it significantly impacts outcomes.
- Optimize GDMT to the fullest extent possible, aiming for target doses used in trials.
- There is a continued need for research to identify new and effective therapies for heart failure. The treatment landscape for heart failure is evolving, with several promising agents under investigation.
- Individualized treatment decisions, based on patient characteristics and response to therapy, are paramount. The importance of multidisciplinary care, involving physicians, nurses, pharmacists, and other healthcare professionals, in managing heart failure patients.
- The need for patient education and engagement in self-care to improve adherence and outcomes. The role of cardiac rehabilitation and lifestyle modifications in improving functional capacity and quality of life.
- The potential for device therapies (ICDs, CRT) to improve outcomes in appropriately selected patients. The importance of addressing comorbidities, such as diabetes, hypertension, and sleep apnea, in heart failure management.
- The need for ongoing research to identify novel therapeutic targets and develop more effective treatments for heart failure. The ultimate goal of heart failure management is to improve patient survival, reduce hospitalizations, and enhance quality of life.

2. Panel discussion : Advancing Heart Failure Management: Bridging Medical Therapies with ICDs and CRT-D.

The next part of this session was a Panel discussion on Advancing Heart Failure Management: Bridging Medical Therapies with ICDs and CRT-D.

Moderator:
Dr. Anand Kumar Pandey
Senior Director - Cardiology
Cardiac Sciences, Cardiology, Interventional Cardiology Max Vaishali

Panellists:

Dr Vivek Chaturvedi
Professor and Head of Cardiology
Amrita Institute of Medical Sciences, Faridabad

Dr Sandeep Singh
Senior Director & Head – CTVS
MAX Super speciality Hospital , Vaishali , Ghaziabad

Dr. Amitabh Yaduvanshi
Senior Consultant Interventional Cardiologist, Holy Family Hospital , New Delhi

The panel discussion provided valuable insights into the evolving landscape of heart failure management, highlighting the importance of integrating medical therapies with device and surgical options. The panellists emphasized the need for a personalized approach, careful patient selection, and ongoing monitoring to optimize outcomes in this complex patient population.

Key Points of the Panel Discussion are as below:

1. Indications for Device Therapy in Heart Failure:

- Implantable Cardioverter-Defibrillator (ICD):

Secondary Prevention:

- Prior history of hemodynamically significant ventricular tachycardia (VT) or ventricular fibrillation (VF) not due to a reversible cause or within the first 48 hours of a myocardial infarction (MI).
- Class 1A indication for ischemic cardiomyopathy.
- Class 1B indication for non-ischemic cardiomyopathy.

Primary Prevention:

- Left ventricular ejection fraction (LVEF) ≤ 35% despite optimal medical therapy for at least 3 months.
- NYHA functional class II-III symptoms.
- Ischemic or non-ischemic cardiomyopathy.

Cardiac Resynchronization Therapy (CRT):

- LVEF ≤ 35%.
- Symptomatic heart failure (NYHA class II-IV) despite optimal medical therapy for at least 3 months.
- Left bundle branch block (LBBB) with QRS duration ≥ 150 ms: Class 1A indication.
- LBBB with QRS duration 130-149 ms: Class 1B indication.
- Non-LBBB with QRS duration ≥ 150 ms: Class 2A indication.
- Non-LBBB with QRS duration 130-149 ms: Class 2B indication.
- Most patients who meet criteria for CRT also meet criteria for an ICD (CRT-D).

2. Identifying Non-Responders to CRT:

- Clinical Factors:
    - Advanced age.
    - Severe renal dysfunction (CKD).
    - Severe pulmonary hypertension (PH).
    - Right bundle branch block (RBBB) morphology.
- Imaging:
    - Echocardiography: Assessment of dyssynchrony, scar burden.
    - Cardiac MRI: Assessment of scar burden and location (particularly in non-ischemic cardiomyopathy).

3. Role of the Surgeon in Heart Failure Management:

- Coronary Artery Bypass Grafting (CABG):
    - May be beneficial in patients with HFrEF and significant coronary artery disease, particularly if there is viable myocardium.
    - The decision to perform CABG in patients with very low LVEF is complex and should be individualized.
- Surgical Ventricular Restoration (SVR):
    - Procedures like the Dor procedure to reshape the left ventricle and exclude aneurysmal segments.
    - May be considered in select patients with ischemic cardiomyopathy and a large anterior aneurysm.

- Mitral Valve Repair:
    - Repair of significant mitral regurgitation (MR) may improve hemodynamics and symptoms in some patients.
    - Mitral valve replacement is generally not preferred unless there is severe chordal involvement.
- Left Ventricular Assist Devices (LVADs):
    - Bridge to transplantation or destination therapy in patients with end-stage heart failure.
    - LVADs are becoming increasingly sophisticated and durable, with improved long-term survival.
    - May eventually replace heart transplantation as the preferred option for many patients.
- Heart Transplantation: Remains the gold standard for end-stage heart failure, but limited by donor organ availability.

4. Pre-Discharge Optimization of GDMT:

- All four pillars of GDMT should be initiated and up-titrated as tolerated before hospital discharge. This may involve starting with low doses of multiple drugs rather than maximizing the dose of a single agent. The four pillars should ideally be in place within four weeks after starting.

5. Role of Iron Studies and Iron Replacement:

- Iron deficiency is common in heart failure patients, even without anemia. Iron studies (ferritin, transferrin saturation) should be performed in all heart failure patients.
- Intravenous iron supplementation improves symptoms, functional capacity, and may reduce hospitalizations.

6. Newer Technologies and Considerations:

- Bluetooth-Enabled Devices: Allow for remote monitoring without the need for a separate bedside monitor.
- Leadless Pacemakers: May play a role in CRT in the future.
- Subcutaneous ICDs: An option for patients at risk of sudden cardiac death who do not require pacing.

7. Other Important Points:

- Vaccination: Influenza and pneumococcal vaccination are important in heart failure patients.
- Cardiac Rehabilitation: Structured exercise programs can improve functional capacity and quality of life.
- Multidisciplinary Care: A team approach involving cardiologists, surgeons, electrophysiologists, nurses, and other specialists is essential.

Key Takeaways:

- Device therapy (ICDs and CRT) plays a crucial role in improving outcomes in appropriately selected heart failure patients. Careful patient selection is essential to maximize the benefits and minimize the risks of device therapy.
- Surgical options, including LVADs and heart transplantation, are important for patients with advanced heart failure. Optimization of GDMT before discharge and close follow-up are essential. Iron deficiency should be routinely assessed and treated.
- Newer technologies are enhancing the capabilities of device therapy. A holistic approach to heart failure management is needed, addressing not only medical and device therapies but also lifestyle factors, comorbidities, and patient preferences.

IX. Diabetes And Cardiometabolic Health

The subsequent session was an industry sponsored Symposium on **Diabetes And Cardiometabolic Health** with topics ranging from RAAsi optimization, to role of ARNI in HFreF, evolving role of Semaglutide and long-acting insulin therapeis in the management of diabetes.

Session Coordinators:

Dr Setu Gupta
DM Endocrinology, Sir Ganga Ram Hospital
EDPA member

Dr Sumer Sharma
MD Medicine, Consultant Physician
EDPA member

4:15 pm - 5:55 pm	DIABETES AND CARDIOMETABOLIC SYMPOSIUM Session Coordinators: Dr Setu Gupta, Dr Sumer Sharma		
4:15 pm - 4:35 pm	**Hyperkalemia and the importance of RAASi optimization**	Dr Vijay Kumar Sinha	Dr R M Chhabra Dr Pankaj Nand Choudhary Dr Anupam Prakash
4:35 pm - 4:55 pm	**Case based Discussion on HFrEF with LVEF improvement post treatment with ARNI**	Dr Vishal Rastogi	Dr Paras Gangwal Dr Amitabh Khanna Dr Vandana Garg
4:55 pm - 5:25 pm	**Initiate at Onset: Early intervention for effective control with oral semaglutide**	Dr Sanjay Kalra	Dr Prahlad Chawla Dr Ajay Kumar Gupta
5:25 pm - 5:55 pm	**Path Breaking Innovation in Diabetes Therapy -Degludec and IDegAsp**	Dr Pankaj Aneja	Dr RPS Makkar

1. Hyperkalemia and the importance of RAASi optimization

The first talk in this symposium as by **Dr Vijay Kumar Sinha,** senior nephrologist from Jaypee Hospital, Noida on the topic of Hyperkalaemia and importance of RAASi optimization and new drugs in treatment of hyperkalaemia.

Dr. Sinha's lecture provides a comprehensive overview of the challenges of hyperkalemia in the context of RAAS inhibitor therapy and introduces ***sodium zirconium cyclosilicate*** as a promising new option for managing this common electrolyte disorder. He highlights the potential for this novel potassium binder to enable optimization of RAAS inhibitor therapy, improve adherence, and potentially improve cardiorenal outcomes in patients with heart failure and CKD.

Speaker :
Dr Vijay Kumar Sinha
MBBS, MD (Internal Medicine), DNB (Nephrology)
Director, Department of Nephrology & Kidney Transplant, Jaypee Hospital, Noida

Topic:
Hyperkalemia and the Importance of RAASi Optimization

Chairpersons
Dr RM Chhabra, Dr PN Chaudhary, Dr Anupam Prakash

Key Points from Dr. Vijay Kumar Sinha's Lecture:

1. Hyperkalemia: Definition and Prevalence:

- Definition: No universally accepted definition, but often defined as serum potassium > 5.0 or 5.5 mEq/L. Severe hyperkalemia is generally considered > 6.5 mEq/L.
- Prevalence:
    - General population: 2-3%.
    - Patients with advanced CKD, diabetes, and on RAAS inhibitors: 40-50%.
    - Patients with severe heart failure on spironolactone: ~40%.
    - Hemodialysis patients: ~25%.
    - Diabetes mellitus alone: ~17%
    - Hypertension with ACEi/ARB/MRA: 8-17%

2. Causes of Hyperkalemia:

- Reduced kidney function (CKD).
- Acidosis.
- Medications:
    - RAAS inhibitors (ACE inhibitors, ARBs, ARNIs).
    - Mineralocorticoid receptor antagonists (MRAs) (spironolactone, eplerenone, finerenone).
    - Other drugs (e.g., potassium-sparing diuretics, NSAIDs, trimethoprim-sulfamethoxazole).

3. Consequences of Hyperkalemia:

- Direct Effects (Acute Hyperkalemia):
    - Muscle weakness, paralysis.

    - Cardiac conduction abnormalities (tall peaked T waves, widened QRS, bradycardia, asystole, ventricular fibrillation).
    - Sudden cardiac death.
- Indirect Effects (Chronic Hyperkalemia):
    - Progression of CKD.
    - Limitation of RAAS inhibitor use, leading to worse cardiorenal outcomes.
- Increased Mortality: Hyperkalemia is associated with increased mortality in patients with CKD and acute myocardial infarction.
- Increased Hospitalization: Hyperkalemia is associated with increased hospitalization in patients with CKD and heart failure.

4. The RAAS Inhibitor Dilemma:

- RAAS inhibitors (ACEi, ARBs, ARNIs) and MRAs are crucial components of guideline-directed medical therapy (GDMT) for heart failure and CKD.
- They improve survival, reduce hospitalizations, and slow the progression of kidney disease. However, they increase the risk of hyperkalemia, especially in patients with CKD. Hyperkalemia often leads to down-titration or discontinuation of these life-saving medications.

5. The Problem of Suboptimal RAAS Inhibitor Use:

- Many patients with heart failure and CKD are not receiving optimal doses of RAAS inhibitors due to the fear of hyperkalemia.
- Studies show that only a small percentage of patients achieve target doses of ACEi, ARBs, ARNIs, and MRAs. Discontinuation or down-titration of RAAS inhibitors is associated with worse clinical outcomes (increased morbidity and mortality).

6. Management of Hyperkalemia:

- Acute Hyperkalemia:
    - Emergency Treatment:
    - Calcium gluconate (to stabilize the myocardium).
    - Insulin and glucose (to shift potassium intracellularly).
    - Beta-2 agonists (e.g., albuterol) (to shift potassium intracellularly).
    - Sodium bicarbonate (in cases of metabolic acidosis).
    - Hemodialysis or peritoneal dialysis (for potassium removal).
    - Potassium Removal:
    - Diuretics (loop diuretics).
    - Traditional potassium binders (e.g., sodium polystyrene sulfonate).
    - Dialysis.
- Chronic Hyperkalemia:
    - Low-potassium diet.
    - Discontinuation or dose reduction of RAAS inhibitors (undesirable).
    - Traditional potassium binders (e.g., sodium polystyrene sulfonate):

- Limitations: Slow onset of action, GI side effects (including rare but serious intestinal necrosis), sodium overload, poor palatability, drug interactions.
- Novel Potassium Binders:
- Patiromer: Approved in 2015 (not yet available in India).
- Sodium Zirconium Cyclosilicate (SZC) (Lokelma): Approved in 2018, expected to be available in India soon.

7. Sodium Zirconium Cyclosilicate (SZC):

- Mechanism: A non-absorbed, selective potassium binder that traps potassium in the GI tract in exchange for sodium and hydrogen.
- Efficacy: Rapidly lowers serum potassium (within 1-4 hours). Maintains normokalemia with long-term use (up to 1 year in clinical trials). Effective in patients with CKD, heart failure, diabetes, and those on RAAS inhibitors.
- Safety: Generally well-tolerated. Low incidence of hypokalemia. Most common side effect: Edema (in long-term studies, mostly mild to moderate). No significant drug interactions. Should be administered two hours before or after oral medications.
- Benefits: Enables optimization of RAAS inhibitor therapy by preventing or treating hyperkalemia. May improve cardiorenal outcomes by allowing patients to remain on life-saving RAAS inhibitors.

8. Key Takeaways:

- Hyperkalemia is a common and serious problem in patients with heart failure, CKD, and diabetes, especially those on RAAS inhibitors.
- It limits the use of life-saving RAAS inhibitors and is associated with increased morbidity and mortality. Traditional potassium binders have significant limitations.
- Novel potassium binders, such as sodium zirconium cyclosilicate (SZC), offer a more effective and better-tolerated option for managing chronic hyperkalemia. SZC can help optimize RAAS inhibitor therapy and potentially improve cardiorenal outcomes.
- Regular potassium monitoring is important in patients on RAAS inhibitors, especially those with CKD and heart failure.
- Note: AstraZeneca Pharma India Ltd has received approval from India's drug regulator to import and sell sodium zirconium cyclosilicate powder for treating hyperkalaemia in adults. This clearance enables the launch of Lokelma in India, contingent on obtaining related statutory approvals.

Additional Points:

- The lecture emphasizes the importance of a proactive approach to hyperkalemia management, focusing on prevention and early intervention. It highlights the need for individualized treatment decisions based on patient characteristics, comorbidities, and the severity of hyperkalemia. It underscores the importance of balancing the risks and benefits of RAAS inhibitor therapy.
- The potential for SZC to improve adherence to RAAS inhibitors by reducing the fear of hyperkalemia among clinicians and patients.

- The need for further research to evaluate the long-term effects of SZC on clinical outcomes, such as mortality and hospitalizations. The importance of educating healthcare professionals and patients about the risks of hyperkalemia and the benefits of optimizing RAAS inhibitor therapy.
- The potential for SZC to be used in other settings where hyperkalemia is a concern, such as in patients with end-stage renal disease on dialysis.
- The need for a multidisciplinary approach to the management of hyperkalemia, involving nephrologists, cardiologists, primary care physicians, and pharmacists.

2. Case based approach to HFreF and LVEF improvement with ARNI

The next talk in this symposium was by **Dr Vishal Rastogi** on HFrEF and importance of ARNI in its management. Dr. Rastogi's lecture provided a strong argument for continuing GDMT, particularly ARNI, in patients with HFrEF who have experienced improvement in LVEF and symptoms. He effectively used a case-based approach to illustrate the potential risks of de-escalating therapy and emphasizes the importance of adhering to guideline recommendations to optimize long-term outcomes in this patient population.

Speaker :
Dr Vishal Rastogi
MBBS, MD, DM CARDIOLOGY
Director, Interventional Cardiology and Head of Advanced Heart Failure Management
Fortis Escorts Heart Institute , Okhla, Delhi

Topic
Case-Based Discussion on HFrEF with LVEF Improvement Post Treatment with ARNI:

Chairpersons
Dr Paras Gangwal, Dr Amitabh Khanna, Dr Vandana Garg

Key Points from Dr. Vishal Rastogi's Case-Based Discussion on HFrEF with LVEF Improvement Post Treatment with ARNI:

1. Case Presentation:

- A patient with heart failure with reduced ejection fraction (HFrEF) diagnosed three years ago (LVEF 32%, NT-proBNP elevated) was started on guideline-directed medical therapy (GDMT), including sacubitril/valsartan (ARNI), beta-blockers, mineralocorticoid receptor antagonists (MRAs), and SGLT2 inhibitors.
- On follow-up, the patient showed significant improvement:
    - LVEF increased to 43%.
    - NT-proBNP decreased to 289 pg/mL (near-normal).
    - 6-minute walk test improved.
    - Symptoms improved (NYHA class likely improved, though not explicitly stated).
- The central question: Should the patient's medications, particularly ARNI, be reduced or discontinued because of the improvement in LVEF and symptoms?

2. The Myth of "Stable" Heart Failure:

- Dr. Rastogi emphasizes that there is no such thing as truly stable heart failure.
- Heart failure is a relentlessly progressive condition, even if symptoms are well-controlled.
- Underlying structural and molecular abnormalities continue to progress, even in asymptomatic patients.
- Patients with "stable" heart failure are still at high risk of mortality and hospitalization.

3. The Importance of Guideline-Directed Medical Therapy (GDMT):

- GDMT, including the four pillars (beta-blockers, ACEi/ARB/ARNI, MRA, SGLT2i), is the foundation of HFrEF treatment.
- It reduces mortality, hospitalizations, and improves functional capacity.
- Optimization of GDMT is crucial: All eligible patients should receive all four drug classes unless contraindicated. Doses should be up-titrated to the maximum tolerated or target doses.

4. The Problem of Underutilization and Discontinuation of GDMT:

- Many patients with HFrEF are not on optimal GDMT.
- Studies show that a significant proportion of patients are on low or sub-therapeutic doses of these medications. Discontinuation of GDMT is common and is associated with increased mortality. MRAs are most frequently discontinued.

5. The Dangers of Stopping ARNI (and other GDMT) in Patients with Improved LVEF:

- Stopping ARNI, even in patients with improved LVEF, can lead to:
    - Worsening of LVEF.
    - Increase in left ventricular end-diastolic volume (remodeling).
    - Worsening of NYHA functional class.
    - Increased risk of death and hospitalization.
- The TRED-HF trial demonstrated the negative consequences of stopping GDMT in patients with improved LVEF.

6. Guidelines Recommend Continuing GDMT:

- Both European Society of Cardiology (ESC) and American College of Cardiology/American Heart Association (ACC/AHA) guidelines recommend continuing GDMT indefinitely in patients with HFrEF, even if LVEF improves and symptoms resolve.

7. ARNI as First-Line Therapy:

- Current guidelines recommend ARNI as the preferred first-line therapy over ACE inhibitors or ARBs in patients with HFrEF.
- This applies to:
    - De novo HFrEF patients.
    - Patients already on an ACE inhibitor or ARB (who should be switched to ARNI).
    - Hospitalized HFrEF patients (once stabilized).

8. Choosing the Right ARNI:

- Dr. Rastogi emphasizes the importance of using the innovator ARNI (sacubitril/valsartan) due to its unique supramolecular complex and specific 1:1 molar ratio of sacubitril and valsartan.
- Studies have shown differences in dissolution profiles and sodium content between the innovator and generic versions.

9. Key Takeaways:

- "Stable" heart failure is a myth. The disease continues to progress even in asymptomatic patients. GDMT should be optimized and continued indefinitely in patients with HFrEF, even if LVEF improves.
- ARNI is the preferred first-line therapy over ACE inhibitors or ARBs. Discontinuing ARNI or other GDMT components can lead to worse outcomes. Choose the right ARNI (innovator molecule) for optimal results.

Additional Points:

- The lecture highlights the importance of recognizing the dynamic nature of heart failure and the need for ongoing monitoring and adjustment of therapy. It emphasizes the importance of patient education and adherence to GDMT.
- It underscores the need for clinicians to be proactive in optimizing GDMT and not to be complacent when patients appear "stable." The potential for overtreatment is acknowledged, but the risks of undertreatment are considered to be greater.
- The lecture briefly touches upon the concept of "reverse remodeling" with GDMT, where LVEF and other cardiac parameters may improve with optimal therapy.
- The need for a long-term perspective in managing HFrEF, as it is a chronic, progressive disease. The importance of a multidisciplinary approach to heart failure care.
- The role of patient preferences and shared decision-making in treatment choices.

3. Initiate at onset: Early intervention for effective control with oral Semaglutide

The third talk in this symposium was by **Dr Sanjay Kalra**, prominent endocrinologist from Karnal , Haryana and an eminent speaker in national and international conferences.

Dr. Kalra's lecture provided a comprehensive overview of the current state of diabetes care and the emerging role of oral semaglutide. He challengd clinicians to think beyond traditional approaches and to embrace a more holistic, patient-centred, and proactive approach to management. He emphasized the importance of early intervention, comprehensive risk assessment, and individualized treatment strategies.

His use of humor, metaphors, and real-world examples made the lecture engaging and relatable. Overall, his message was one of hope and optimism, highlighting the potential for new therapies to transform the lives of people with diabetes and obesity.

Speaker :
DR Sanjay Kalra
MBBS, MD, DM Endocrinology,
Bharti Hospital, Karnal

President, Association of Longevity and Anti-ageing Medicine
Past President, Endocrine Society of India (ESI)
Past President, South Asian Federation of Endocrine Societies (SAFES)
Past President, Indian Professional Association for Transgender Health (IPATH)

Topic:
Early Intervention with Oral Semaglutide

Chairpersons:
Dr Prahlad Chawla, Dr Ajay Kumar Gupta

Key Points from Dr. Sanjay Kalra's Lecture on Early Intervention with Oral Semaglutide:

1. The Changing Landscape of Diabetes Care:

- Diabetes management has become more complex due to the increasing prevalence of comorbidities, complications, and confounding factors.
- Clinicians need to address not only hyperglycemia but also weight management and cardiovascular health.
- The traditional linear approach to treatment needs to be updated.

2. The Challenge of Obesity and Atypical Cardiovascular Disease (CVD):

- Obesity is a significant issue, and clinicians should be aware of "normal weight obesity" (normal BMI but high body fat percentage).
- Many patients have subclinical CVD, which may not be apparent through symptoms or routine tests.
- Clinicians should be proactive in assessing CVD risk, even in seemingly asymptomatic patients.

3. The Importance of History Taking:

- Thorough history taking is crucial for identifying atypical presentations of CVD and other conditions.
- Clinicians should actively inquire about symptoms that patients may not readily volunteer.

4. The "Quantum" Nature of Diabetes and Obesity:

- Diabetes and obesity are complex, multifactorial conditions that require a "quantum" approach to treatment, addressing multiple factors simultaneously.
- The "4 Bs" (brain, bowel, beta cell, bulk and brawn) and "4 Es" (enteric microbiome, external/environmental factors, external limiters, emotional issues) are helpful frameworks for understanding the complexity.

5. The Role of GLP-1 Receptor Agonists (GLP-1RAs):

- GLP-1RAs are a valuable class of drugs that address multiple aspects of the "ominous octet" (or "octagon of opportunities") of diabetes pathophysiology.
- They offer benefits beyond glycemic control, including weight loss, blood pressure and lipid management, and cardiorenal protection.

6. Oral Semaglutide: A New Option:

- Oral semaglutide is a novel GLP-1RA available in a tablet form.
- It has a unique absorption enhancer (SNAC) that facilitates its oral bioavailability.
- It maintains a more physiological "entero-lumino-hepato-systemic gradient" compared to injectable GLP-1RAs.

7. Clinical Evidence for Oral Semaglutide:

- The PIONEER clinical trial program demonstrated the efficacy and safety of oral semaglutide.
- It showed significant reductions in HbA1c and body weight compared to placebo and other antidiabetic agents.
- It also demonstrated cardiovascular safety and potential benefits.
- The SOLE study showed cardiovascular superiority.

8. Practical Considerations for Using Oral Semaglutide:

- It is available in 3 mg, 7 mg, and 14 mg strengths.
- The most common side effects are gastrointestinal (nausea, diarrhea), which are usually transient.
- Some patients may experience a decrease in appetite for certain foods (sweets, carbohydrates, fast foods) and even alcohol.

- There may be a transient feeling of unhappiness or loss of zest in some patients, which usually resolves.

9. Cost and Accessibility:

- The cost of oral semaglutide is a consideration (around 300 rupees per day).
- Clinicians can use various communication strategies to discuss the value proposition with patients.

10. Key Takeaways:

- Early and comprehensive intervention in diabetes is crucial.
- Oral semaglutide is a promising new option that addresses multiple aspects of diabetes and obesity.
- Clinicians should adopt a proactive, patient-centered approach, focusing on individual needs and preferences.
- Communication and patient education are essential for successful implementation of new therapies.

Additional Points:

- Dr. Kalra emphasizes the importance of using positive language and framing treatment benefits in terms of "keeping the heart and kidney healthy." He encourages clinicians to be "gatekeepers of health" by actively identifying and addressing risk factors.
- He highlights the need for ongoing pharmacovigilance and reporting of any unexpected effects. He used analogies and metaphors (e.g., Ravana's ten heads, quantum physics, insurance) to explain complex concepts in a relatable way.
- He advocates for a shift from a disease-focused approach to a health-focused approach, promoting "elegant aging" and preventing premature complications.
- He playfully uses the phrase "penny-wise, pound-foolish" to emphasize the long-term benefits of investing in effective treatments.
- He emphasizes the importance of a multidisciplinary approach, involving not only physicians but also dietitians, psychologists, and other healthcare professionals.
- The need for ongoing research to develop even more effective and accessible treatments for diabetes and obesity. The importance of addressing health disparities and ensuring equitable access to care for all patients.
- The role of public health initiatives in promoting healthy lifestyles and preventing diabetes and obesity. The need for a paradigm shift in how we think about and manage chronic diseases, moving from a reactive to a proactive and preventive approach.
- The potential for personalized medicine to tailor treatment strategies based on individual patient characteristics and preferences. The importance of patient empowerment and shared decision-making in achieving optimal outcomes.
- The role of technology, such as telehealth and digital health tools, in enhancing diabetes care. The need for continued advocacy to raise awareness about diabetes and obesity and to reduce the stigma associated with these conditions.
- The importance of addressing the social determinants of health that contribute to disparities in diabetes and obesity prevalence and outcomes. The potential for public-private partnerships to accelerate research and development of new therapies and to improve access to care.

- The role of government policies in promoting healthy food environments, encouraging physical activity, and supporting diabetes prevention and management programs. The need for a holistic approach to diabetes care that addresses not only the physical but also the emotional, psychological, and social well-being of patients.
- The importance of hope and optimism in empowering patients to live well with diabetes and to achieve their health goals. The need for continued collaboration and knowledge sharing among healthcare professionals, researchers, policymakers, and patient advocacy groups to advance the field of diabetes care.
- The potential for future breakthroughs in diabetes and obesity research to transform the lives of millions of people worldwide. The importance of celebrating the progress that has been made in diabetes care while acknowledging the challenges that remain.
- The need for a collective commitment to improving the health and well-being of all individuals living with diabetes and obesity.

4. Path Breaking Innovation in Diabetes Therapy - Degludec and IDegAsp"

The last talk in this symposium was by Dr Pankaj Aneja, eminent diabetologist from Delhi. Dr. Pankaj Aneja is currently Director - Diabetes & Metabolic Diseases at Max Hospital, Shalimar Bagh. He is also a senior consultant physician and diabetologist at Naveda Healthcare Centre, Delhi.

He spoke on **Degludec and IDegAsp Insulins as innovative therapies in Diabetes management.** Dr. Aneja's lecture provided a clear and concise overview of the benefits of insulin degludec and IDegAsp, emphasizing their unique properties and potential to improve diabetes management.

He effectively used clinical evidence and practical examples to illustrate the advantages of these newer insulin formulations. The lecture highlighted the ongoing evolution of insulin therapy and the importance of tailoring treatment to individual patient needs.

Speaker :
Dr. Pankaj Aneja
MD (Medicine), FRCP (UK), FICP, FIMSA, FAGE, FGAPIO, FIACM
Director - Diabetes & Metabolic Diseases at Max Hospital, Shalimar Bagh

Topic:
Path Breaking Innovations in Diabetes Therapy - Degludec and IDegAsp

Chairpersons:
Dr RPS Makkar, Dr Pankaj Chaudhary

Key Points from the Lecture:

I. Insulin Degludec (Tresiba): A Novel Ultra-Long-Acting Basal Insulin

A. Evolution of Basal Insulin:

- The quest for an ideal basal insulin has progressed from NPH to first-generation analogs (glargine U100, detemir) to second-generation, ultra-long-acting analogs (degludec, glargine U300).
- Degludec represents a significant advancement with its unique pharmacokinetic and pharmacodynamic properties.

B. Mechanism of Action:

- After subcutaneous injection, degludec forms soluble multi-hexamers that create a depot. Zinc gradually diffuses from the multi-hexamers, leading to the slow and continuous release of degludec monomers into the circulation.

- This results in an ultra-long duration of action (>42 hours) and a flat, stable glucose-lowering profile.

C. Pharmacokinetic and Pharmacodynamic Advantages:

- Ultra-Long Duration of Action: Allows for once-daily dosing with flexibility in the timing of administration (8-40 hours between injections).
- Flat and Stable Profile: Minimizes peaks and troughs in insulin levels, reducing the risk of hypoglycemia.
- Low Within-Day and Day-to-Day Variability: Provides consistent glucose control throughout the day and across different days.
- Flexibility in Dosing Time: This is a major advantage for patients with varying schedules (e.g., shift workers, travelers).

D. Clinical Evidence:

- CONFIRM Study (Real-World Evidence):
    - Compared degludec to glargine U300 in a large, real-world setting.
    - Demonstrated a 30% lower rate of hypoglycemia with degludec.
    - Showed a significantly lower proportion of patients experiencing multiple hypoglycemic episodes.
- Other Studies:
    - Demonstrated non-inferiority to other basal insulins in terms of HbA1c reduction.
    - Showed a lower risk of nocturnal hypoglycemia compared to glargine U100.
    - Demonstrated improved time in range (TIR) compared to glargine U100.
- DEVOTE Trial: Established the cardiovascular safety of degludec.

E. Use in Special Populations:

- Pregnancy: The EXPECT trial demonstrated the non-inferiority of degludec to detemir in pregnant women with type 1 diabetes, leading to a label update allowing for its use during pregnancy if clinically needed.
- Pediatric Patients: Approved for use in children >1 year of age.
- Elderly: Safe and effective in older adults.
- Renal and Hepatic Impairment: Can be used in patients with renal or hepatic impairment without dose adjustment.

F. Key Advantages Summarized:

- Ultra-long, flat, peakless profile.
- Low variability (within-day and day-to-day).
- Reduced risk of hypoglycemia (especially nocturnal).
- Flexibility in dosing time.
- Wide range of approved uses.

II. Insulin Degludec Aspart (IDegAsp) (Ryzodeg): A Novel Co-formulation

A. Rationale for Co-formulation:

- Combines the benefits of an ultra-long-acting basal insulin (degludec) with a rapid-acting insulin analog (aspart) in a single injection. Addresses both basal and prandial insulin needs.
- Simplifies insulin regimens, potentially improving adherence.

B. Formulation and Properties:

- Co-formulation: A soluble combination of degludec (70%) and aspart (30%) in a fixed ratio.
- Distinct Pharmacokinetic Profiles: The two components retain their individual pharmacokinetic properties after injection. Degludec provides a stable basal effect, while aspart provides rapid prandial coverage.
- No Resuspension Required: Unlike premixed insulins, IDegAsp does not require resuspension before injection.

C. Clinical Evidence:

- SMART Study (India): Demonstrated significant reductions in HbA1c, fasting plasma glucose, and postprandial glucose in Indian patients with type 2 diabetes. Showed a good safety profile.
- Meta-analysis: Compared IDegAsp to insulin glargine. Demonstrated lower nocturnal confirmed hypoglycemia with IDegAsp. Showed superior HbA1c reduction with IDegAsp.

D. Practical Advantages:

- Mealtime Flexibility: Can be administered with any major meal of the day, allowing for flexibility in meal timing.
- Simplified Regimen: Reduces the number of injections compared to basal-bolus regimens.
- Improved Quality of Life: Studies suggest that patients experience improved quality of life and treatment satisfaction with IDegAsp.
- Reduced Pill Burden: May allow for a reduction in the number of oral antidiabetic drugs (OADs) needed.

E. Use in Different Patient Populations:

- Elderly: Can be used in older adults.
- Renal Impairment: Can be used in patients with renal impairment.
- Hepatic Impairment: Can be used in patients with hepatic impairment.
- Type 1 Diabetes: Can be used in adults with type 1 diabetes.
- Ramadan Fasting: May be particularly useful for patients who fast.
- Patients on Shift Work or with Irregular Schedules: Offers flexibility in dosing time.

F. Key Advantages Summarized:

- Combination of basal and prandial coverage in a single injection.
- Flexibility in meal timing. Simplified regimen. Improved glycemic control with a lower risk of hypoglycemia compared to some other insulin regimens. Good tolerability and safety profile.

III. Conclusion:

- Insulin degludec and IDegAsp represent significant advancements in insulin therapy, offering improved glycemic control, reduced hypoglycemia risk, and greater convenience for patients with diabetes.
- These innovations have the potential to improve adherence, quality of life, and long-term outcomes in a wide range of patients.

Additional Points:

- Dr. Aneja highlights the importance of individualized treatment decisions based on patient characteristics, preferences, and lifestyle factors. He emphasizes the need for patient education on proper insulin administration and hypoglycemia management.
- He mentions the availability of a WhatsApp chatbot service ("Mishti") from Novo Nordisk that provides information and support for patients on insulin therapy. The potential for these newer insulins to simplify treatment regimens and reduce the burden on patients and healthcare systems.
- The importance of considering the cost-effectiveness of different insulin therapies. The need for ongoing research to further evaluate the long-term benefits and risks of these insulins in various patient populations.
- The role of these insulins in combination with other antidiabetic agents, such as GLP-1 RAs and SGLT2 inhibitors.

X. EDPA Champion of The Month Awards

1. EDPA Champion for Jan 2025- Dr RPS Makkar

Heartfelt Congratulations to Dr. RPS Makkar and the EDPACON-2024 Organizing Committee for a Grand Success!

The East Delhi Physicians Association (EDPA) takes immense pride in congratulating **Dr. RPS Makkar**, Organizing Secretary of *EDPACON-2024*, along with the entire Organizing Committee, for executing a truly **memorable and landmark Silver Jubilee Conference on December 22, 2024**, at Hotel Le Méridien, New Delhi.

Marking 25 years of EDPA's journey, *EDPACON-2024* was not just a scientific conference but a celebration of camaraderie, professional excellence, and the association's legacy. Under Dr. Makkar's watchful eye and careful planning of the organizing committee , the event witnessed the participation of **over 300 physicians** from across Delhi-NCR, national speakers, special invitees, and past presidents of EDPA — making it a grand success on every front.

For his outstanding efforts and dedication, **Dr. RPS Makkar** is honored with the **EDPA Champion Award** — a token of appreciation for his leadership, vision, and flawless execution of this milestone event.

The EDPA Executive Committee extends its gratitude to Dr. Makkar and every member of the Organizing Committee. Their tireless efforts ensured that *EDPACON-2024* was a resounding success and a proud moment in the history of EDPA. We look forward to many more such stellar academic and professional gatherings in the years to come!

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— EDPA Executive Committee

2. EDPA Champion for Feb 2025- Dr Praful Pandey

Heartiest Congratulations to Dr. Praful Pandey on His Remarkable Achievement!

The East Delhi Physicians Association (EDPA) takes immense pride in congratulating **Dr. Praful Pandey** on successfully completing his **DM in Medical Oncology from AIIMS, New Delhi**, after earlier earning his **MD in Medicine from AIIMS, New Delhi** — a feat that reflects his unwavering dedication, hard work, and academic brilliance.

Dr. Praful Pandey, son of our esteemed senior member **Dr. A.K. Pandey**, Senior Cardiologist at Max Hospital, has made not just his family but the entire EDPA fraternity proud. It is rightly said that a son's accomplishments are a testament to the love, guidance, and support he receives at home — and Dr. Praful's remarkable journey is a shining reflection of that.

For his outstanding achievement, Dr. Praful Pandey was awarded the **EDPA Champion Award for the month of February**. Every milestone he achieves is a result of his pursuit of excellence and the strong values instilled in him by his proud parents.

We extend our special congratulations to **Dr. A.K. Pandey** and his family for this proud moment. It is indeed a joy for all of us to witness the success of the next generation of physicians, carrying forward the legacy of dedication and service to humanity.

The entire EDPA family joins in celebrating this accomplishment. **We are all proud of Dr. Praful Pandey — proud of his achievements, and even more proud of the person he has become.** It a gesture by EDPA to encourage and motivate young doctors to come forward and make us all proud. We wish Dr Praful continued success, growth, and many more laurels in the years ahead.

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— EDPA Executive Committee

3. EDPA Champion for March 2025

EDPA Celebrates International Women's Day 2025 – Honoring the Power of Women in Medicine

"For ALL Women and Girls: Rights. Equality. Empowerment."

On 8th March 2025, the East Delhi Physicians Association (EDPA) came together to celebrate International Women's Day, embracing this year's global theme — *"For ALL Women and Girls: Rights. Equality. Empowerment."* It was a powerful occasion that reflected not only the social significance of the day but also EDPA's commitment to recognizing the invaluable contribution of women doctors in healthcare, society, and within the association itself.

The event was a heartfelt tribute to the many talented, dedicated, and inspiring women physicians who have been instrumental in shaping EDPA over the years. These women have not only excelled in their medical fields but have also been strong voices, leaders, and role models within the association. Their tireless work, professional excellence, and compassionate care stand as a testament to the evolving role of women in medicine and leadership.

In a deeply emotional and proud moment, **EDPA conferred the "EDPA Champion Award" for the month of March 2025** to **all its distinguished women members**, recognizing their relentless efforts, their dedication to patient care, and their contribution to the growth and success of the association. This special recognition was designed not just as an award but as a symbol of gratitude, respect, and encouragement — a step toward strengthening women's contributions and amplifying their voices within the EDPA community.

The following esteemed women members of EDPA were honored with the **EDPA Champion Award – March 2025**:

- Dr. Nirmala Lahoti
- Dr. Neeru P Aggarwal
- Dr. Ruby Bansal
- Dr. Tanya Sehgal
- Dr. Swathi Jami
- Dr. Rati Singh
- Dr. Shubhalaxmi Margekar
- Dr. Anivita Aggarwal
- Dr. Pooja Garg
- Dr. Sangeeta Bhargava
- Dr. Harshita Tyagi
- Dr. Meenakshi Jain
- Dr. Aditi Sethi Bhutani
- Dr. Saroj Prakash

Each name represents a story of perseverance, excellence, and dedication. Their contributions have been pivotal in enhancing the scientific, educational, and social fabric of EDPA.

Celebrating Women – A Commitment to Equality and Empowerment

The celebration served as a timely reminder that **unlocking equal rights, power, and opportunities for women is not just necessary — it is the pathway to a stronger, healthier, and more just society**. EDPA strongly believes that empowering women in medicine uplifts the entire healthcare system, as women bring empathy, strength, and a unique perspective that enriches patient care, academic discussions, and leadership roles.

With this event, EDPA reaffirmed its commitment to fostering a **feminist future where no one is left behind**, ensuring that the voices of women doctors are heard, acknowledged, and amplified. Central to this vision is investing in and empowering the next generation of women physicians — **as catalysts for lasting change**. By providing them platforms, opportunities, and recognition, EDPA aims to inspire young women doctors to step forward, lead, and create new milestones in their professional journeys.

The event was not just a celebration of what has been achieved but a call to action — a reminder that there is still work to be done to achieve true equality in medicine and beyond. EDPA pledges to continue creating inclusive spaces where every member, irrespective of gender, feels valued, supported, and empowered to reach their full potential.

A Salute to the Spirit of Women in Medicine

The **International Women's Day celebration 2025** was indeed a memorable occasion — filled with pride, emotions, and motivation. As the awardees received their honors, it was a moment of reflection on their remarkable journeys and an acknowledgment of the road ahead.

On behalf of the entire EDPA community, we extend our **heartfelt congratulations** to all the women members recognized with the **EDPA Champion Award**. Your achievements inspire us all, and your presence strengthens our association in countless ways. We are proud of each one of you — not just for your professional accomplishments but for the resilience, grace, and leadership you bring to the medical profession and society.

Here's to celebrating women — today, every day, and always. Together, we march towards a future of **Rights, Equality, and Empowerment for ALL Women and Girls**.

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— EDPA Executive Committee

XI. Monthly CME Cases

CME on 8th March 2025

1. Case 1: An interesting case of Liver abscess

Presenter :

- Dr Anivita Agarwal (Consultant , DM Infectious Diseases, Sir Ganga Ram Hospital)

Chairpersons:

- Dr Meenakhsi Jain (Senior Director, Dept of Medicine, Max PPG and Noida)
- Dr Pooja Garg, Consultant Physician, EDPA

Case Report: Chronic Right Upper Quadrant Pain with Eosinophilia and Hepatic Lesions

Demographics & History : A 50-year-old female with a known history of hypothyroidism presented with chronic, dull-aching, non-radiating right upper quadrant (RUQ) abdominal pain persisting for 1.5 years. She denied associated fever, weight/appetite loss, gastrointestinal bleeding, or alterations in bowel habits. The patient reported transient, pruritic, erythematous facial rashes occurring over the past year.

Examination Findings

- General examination revealed pallor without icterus, edema, lymphadenopathy, or clubbing.
- Abdominal examination noted RUQ tenderness and hepatomegaly extending ~8 cm below the right costal margin.
- Neurological, chest, and cardiac examinations were unremarkable.

Laboratory Investigations

- Mild anemia was noted (Hb: 10.2 g/dL, Hct: 34.7%).

- Elevated WBC count (11.52 × 10^9/L) with marked eosinophilia (25.9%); absolute eosinophil count was significantly high.
- Normal platelet count (281 × 10^9/L).
- Serum alpha-fetoprotein (AFP) levels were within normal limits.

Imaging Findings Contrast-enhanced CT (CECT) of the abdomen revealed hepatomegaly with multiple, peripheral enhancing lesions located in liver segments V–VIII and the caudate lobe. The largest lesion measured approximately 44 × 48 × 36 mm, abutting the right portal vein. While metastatic lesions were radiologically considered, the absence of a known primary tumor or classic malignancy risk factors raised suspicion for alternative diagnoses.

Key Clues ; The patient gave a history of eating *water crests from a pond next to her house*. The combination of RUQ pain, significant eosinophilia, chronic liver lesions, and pruritic facial rashes , also with eating water crests from a pond suggested a parasitic etiology. Normal AFP levels made primary hepatocellular carcinoma less likely, and the absence of systemic malignancy signs (e.g., weight loss, focal symptoms) further diminished neoplastic probabilities.

Differential Diagnoses

- Parasitic Hepatic Infection Echinococcosis (hydatid disease) or fascioliasis were prime considerations given the clinical and imaging findings however CT findings of multiple enhancing lesions was not typical of Echinococcus granulosis.

2. Other Helminthic Infections
    - Less commonly, Fasciola hepatica (liver fluke) could account for the presentation.
3. Metastatic Disease with Paraneoplastic Eosinophilia
    - Possible but less likely due to the lack of malignancy-related features.
4. Hyper-eosinophilic Syndromes (e.g., EGPA, Eosinophilic Granulomatosis with Polyangiitis (EGPA),)

- Unlikely, as vasculitis/systemic features (e.g., respiratory involvement) were absent.

Diagnostic Steps and Next Actions

1. Parasitic Serologies: Testing for *Echinococcus* IgG (ELISA) and *Fasciola* IgG is paramount. Sample was sent to Kolkata lab for special testing.
2. Stool Examination: Look for helminthic ova (e.g., *Fasciola*).
3. Advanced Imaging: MRI or detailed ultrasound to assess cystic components or vascular involvement could not be done in this case.
4. Tissue Diagnosis: US-guided or CT-guided lesion biopsy was considered but could not be done.

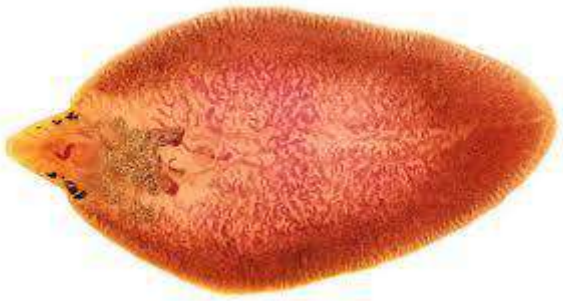
Treatment

- For Fascioliasis: Triclabendazole remains the treatment of choice. It was requested from WHO office to deliver this as it is not available in India.

Key learnings:

Fascioliasis, a parasitic infection caused by liver flukes, can occur when people eat raw or undercooked watercress or other freshwater plants contaminated with Fasciola larvae. This is a parasitic disease caused by liver flukes, specifically Fasciola hepatica (the sheep liver fluke) and, less commonly, Fasciola gigantica. Humans become infected by ingesting aquatic vegetation, particularly watercress, that harbors the larvae (metacercariae) of the liver fluke. The eggs of the liver fluke are released in animal faeces and hatch in water. The larvae (miracidia) infect snails, where they develop into cercariae. The cercariae encyst on aquatic vegetation, becoming metacercariae. When humans eat raw or undercooked vegetation containing these cysts, the larvae mature in the liver and bile ducts.

Not everyone with a Fasciola infection experiences symptoms, but some may experience fever, malaise, nausea, vomiting, abdominal pain, diarrhea, or changes in bowel habits. To avoid infection, avoid eating raw or undercooked watercress and other freshwater plants, especially from areas where livestock graze.



Diagnosis is often based on clinical signs and symptoms, along with a history of eating raw watercress or other aquatic plants. It can be confirmed by fasciola IgG antibody detection available in special labs.

Conclusion:

This case of chronic RUQ pain, liver lesions, and significant eosinophilia represented a parasitic hepatic infection, (fascioliasis). The priority lies in confirming the diagnosis through serologies and imaging, followed by initiating targeted therapy. Biopsy should be reserved for inconclusive findings. *Singahras* or water crests should be properly cleaned before eating ; avoid using your teeth to peel off the skin /outer covering from *Singharas* as the parasite can enter the gut from mouth if this method is used to peel off the skin.

2. Engaging Private practitioners -Strengthening TB notification and treatment

Presenter:

- Dr Ariba (Doctors for you- NGO)

Chairpersons:

- Dr Shubha Laxmi Margekar (Professor Medicine LHMC & SSKH)
- Dr Tanya Sehgal (Consultant Radiologist, CDC, Karkarduma)

Highlights of the talk:

At the recent **EDPA Monthly CME**, a highly informative session was presented by **Doctors For You (DFY)** — a humanitarian organization involved in delivering healthcare in disaster-hit zones and underserved communities across India and internationally. They are also involved in partnering with local governments on public health education. They have tied up with Govt of India to Strengthen TB Notification and Treatment programs targeted towards TB as part of GOI program om TB elimination in India. DFY's session focused on an important and timely topic — **"Engaging Private Practitioners: Strengthening TB Notification and Treatment"** — in alignment with India's **National Tuberculosis Elimination Program (NTEP)**. The session highlighted the critical role private practitioners play in TB control efforts and how their active participation is essential to reducing the TB burden in India.

DFY explained the legal and professional responsibility of all healthcare providers — including private doctors in local practice — to **notify every TB case to the government**. This is mandated under the NTEP framework to ensure that all TB patients are accounted for, properly treated, and supported throughout their therapy, thus minimizing transmission and preventing drug resistance.

The team detailed the simple process of **TB case notification**, which can be done through:

- **Nikshay Portal** (https://nikshay.in)
- Direct reporting to local health authorities
- Using mobile apps or offline forms provided by the program

The discussion emphasized that **early notification and proper treatment linkage** helps the government provide free diagnostic services, medications, nutritional support, and follow-up care to TB patients — significantly improving outcomes.

DFY urged private practitioners to proactively collaborate with the NTEP and contribute to India's ambitious goal of **eliminating TB**. The session was well-received, with active engagement from EDPA members who acknowledged the importance knowing more on tthis process and their role in strengthening this vital public health partnership.

EDPA extended its gratitude to **Doctors For You** for this important session and encourages all members to be vigilant, report TB cases promptly, and support the national mission to make India TB-free.

CME on 14th Feb 2025

EDPA had 2 very good clinical cases that were presented on 14th Feb at the EDPA Monthly CME. Below is a recap of the 2 cases.

Case 1: Liver Transplant in Acute Liver Failure

Presented by: Dr. Ajitabh & Dr. Gajendra, Liver Transplant Team, Max Patparganj

Moderator: Dr Deepak Lahoti (Senior Director, Gastroenterology and Hepatology, Max Hospital PPG)

Chairperson: Dr RPS Makkar. Dr RK Gupta

Case:

- 31-year-old male presented with signs of acute liver failure of unknown aetiology despite extensive work up for underlying cause of liver failure
- Rapid progression to grade 3 hepatic encephalopathy despite all intensive medical measures including PLEX (plasma exchange)
- Successful liver transplant (from sibling sister) performed at Max ppg, saving the patient's life

- Key message:

- Liver Transplant is possible even in acute/late stages, and can be life-saving in appropriately selected patients.
- Physicians should discuss the possibility of Liver Transplant with families in such cases and take advise from Experts to assess this intervention

Case 2: Pyrexia of Unknown Origin

Presented by: Dr Soham, 3rd year DNB Resident, Max Vaishali

Moderator: Dr. Pankaj Chaudhary (Senior Consultant Physician, Max Vaishali)

Chairperson: Dr RPS Makkar

Case:

- Case of pyrexia of unknown origin diagnosed as Brucellosis on Elisa

- Successful treated with Doxycycline and Rifampicin

- Key message:

  - Highlighted importance of considering rare causes of pyrexia

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Thanks to all attendees, offline and online for their presence in the meeting

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CME on 14th Jan 2025

Managing Chronic Pain Syndrome: A Multidimensional Approach

Presenter:

- Dr Anurag Agarwal, HOD, Dept pf Emergency medicine, Fortis Noida

Chairpersons:

- Dr BK Gupta, Dr RPS Makkar

Dr. Anurag Agarwal, a trained anaesthesiologist and pain specialist, delivered a thought-provoking case-based discussion at the EDPA monthly CME on the 14th Feb, on the management of chronic pain syndrome during a recent EDPA event. Chronic pain, being one of the most common complaints bringing patients to medical consultations, demands a nuanced understanding of its multifactorial etiology and management strategies.

Dr. Agarwal emphasized that chronic pain is not merely a symptom but a complex condition arising from an interplay of biological, psychological, and social factors. This biopsychosocial model calls for a multidimensional approach to treatment, tailored to the unique needs of each patient. The discussion shed light on both pharmacologic and non-pharmacologic interventions, underlining the necessity of an integrated approach to achieve optimal outcomes.

Restorative Therapies:

A key component of chronic pain management is the incorporation of restorative therapies, which aim to improve physical function and quality of life. These include:

- **Physiotherapy**: Customized exercises to restore mobility and strength.
- **Exercise**: Regular, structured physical activity to alleviate pain and improve overall well-being.
- **Transcutaneous Electric Nerve Stimulation (TENS)**: Non-invasive electrical stimulation techniques to reduce pain perception.

Interventional Pain Procedures:

Dr. Agarwal highlighted the role of interventional pain procedures as an integral part of multimodal pain management, particularly for refractory cases. The choice of interventions depends on the type of pain, patient comorbidities, and overall treatment goals. Common procedures for managing spine-related pain include:

- **Epidural Steroid Injections**: Used to reduce inflammation and alleviate radicular pain.
- **Radiofrequency Medial Branch Neurotomy**: Targeted ablation of nerve fibers transmitting pain signals.
- **Basivertebral Nerve Ablation**: Focused on treating vertebrogenic pain.
- **Vertebral Augmentation**: Minimally invasive techniques to treat compression fractures.
- **Neuromodulation Techniques**: Advanced options like peripheral nerve stimulation and spinal cord stimulation (SCS) for severe, chronic cases.

Dr. Agarwal stressed that an overarching pain management strategy must balance pharmacological treatments with these therapeutic and interventional modalities to comprehensively address the biopsychosocial facets of chronic pain.

Key Takeaways for Physicians:

1. **Recognize the Complexity**: Chronic pain is not just a physical symptom; it encompasses psychological and social dimensions that require a holistic approach.
2. **Start with a Multimodal Strategy**: Employ a combination of pharmacologic treatments, restorative therapies, and psychosocial interventions tailored to individual patients.
3. **Early Identification of Red Flags**: Identify patients with complex or refractory pain that may benefit from interventional procedures.
4. **Collaborate with Pain Specialists**: Refer patients to a pain specialist when pain is persistent, disabling, or unresponsive to initial therapies.
5. **Educate and Empower Patients**: Help patients understand the chronic pain condition and encourage active participation in their treatment plans.

Case 2. An Interesting case of recurrent abdominal pain with neutropenia

Presented by:

- Dr Soham, 3rd year DNB Resident, Max Vaishali

Moderator:

- Dr. Pankaj Chaudhary (Senior Consultant Physician, Max Vaishali

Chairperson:

- Dr RPS Makkar

Case:

26-year-old female patient presented with multiple episodes of vomiting and upper abdominal pain, but no fever. She was treated with fluids and improved, but had a history of recurrent abdominal pain for a few months prior. She was dehydrated with a blood pressure of 80/60.

Lab results showed hemoglobin of 8.7, normal platelets, low total leukocyte count (TLC) of 3.89, and neutrophils of 50%. CRP was elevated at 59, indicating inflammation.

Repeat labs showed hemoglobin improvement to 9.6, but neutrophils decreased to 40%. A complete blood count (CBC) revealed red blood cell distribution width (RDW) of 38.

ON 7th day, the patient was discharged with clinical improvement on IV antibiotics. After 2 weeks of discharge, the patient was readmitted with fever (103°F), multiple episodes of vomiting, upper abdominal pain, oral ulcers, cough, and shortness of breath. She was severely dehydrated with a systolic blood pressure of 70. She was transferred to the ICU and treated with IV broad-spectrum antibiotics, non-invasive ventilation (NIV), and vasopressors.

Labs showed Hemoglobin was 10.4, TLC had further decreased to 2.5, and neutrophils were critically low at 6%. Metamyelocytes were elevated at 31%, monocytes at 30%, and lymphocytes at 60%.

Later lab results showed that Neutrophils dropped to 2%, resulting in an absolute neutrophil count (ANC) of 0.04, indicating profound neutropenia. Total leukocyte count was 1,990. Dengue IgM was positive, Brucella was positive, procalcitonin was high at 9.43. Liver and kidney function tests were normal, and blood and urine cultures were negative.

A chest X-ray showed haziness in both lungs, prompting a CT scan which revealed bilateral lower lobe consolidation. ON further testing, Viral markers (including CMV, EBV, HSV, and HIV) were negative. A hematologist was consulted to evaluate the patient's condition further. ANA, rheumatoid factor (RF), and anti-cyclic citrullinated peptide (anti-CCP) antibodies were all negative, ruling out certain autoimmune conditions.

The patient was treated with meropenem, an antifungal medication, and vasopressors. Her TLC began to improve, but neutropenia persisted.

Bone Marrow Biopsy and Aspirate was done which showed dysmorphic anemia with leukopenia, severe neutropenia, left shift of maturation, and reactive changes. Lymphocytes were 60-64%, monocytes were 30%, myelocytes were 3%, and blasts were 4%. Maturation arrest was noted.

The bone marrow showed no evidence of myelodysplastic syndrome or leukemia. It showed trilineage hematopoiesis with left shift maturation, excess macrophages, dominance of precursors, and a negative acute leukemia stain. On NGS testing , ELANE gene mutation was reported (most common mutation in cyclical neutropenia). A Primary Diagnosis was CYCLICAL NEUTROPENIA with secondary complications was considered.

The patient was started on cyclosporine and dexamethasone to address neutropenia, and a single injection of granulocyte colony-stimulating factor (G-CSF) (300 micron subcutaneously) was administered. After 3 weeks of readmission, the patient's condition improved. Hemoglobin increased to 9.8, TLC was around 10,000, neutrophils were 48.4%, and ANC was around 66,000. She was discharged from the ICU and transferred to the general ward.

The patient was advised to have follow-up appointments every two weeks.

Key learnings for Physicians:

Clinical features in this case suggest **Recurrent symptoms** (Cyclic pattern of abdominal pain and vomiting , Progressive neutropenia, and Systemic inflammation (elevated CRP), with **Critical Hematologic Findings** (Severe neutropenia (ANC as low as 0.04), with a Left shift with increased metamyelocytes, and Bone marrow showing maturation arrest and a Rapid response to immunosuppression). In addition, there was Systemic Involvement (Pulmonary involvement in the form of bilateral consolidation, with Oral ulcers, Recurrent infections and Hemodynamic instability). Based on these, the **Primary Diagnosis was CYCLICAL NEUTROPENIA with secondary complications**. Differential Diagnoses can include - 1. Large Granular Lymphocytic Leukemia , 2. Autoimmune Neutropenia , 3. Early Myelodysplastic Syndrome .

The Supporting evidence in support of Cyclical Neutropenia included the following features:

1. Cyclic pattern of symptoms
2. Bone marrow showing maturation arrest
3. Dramatic response to G-CSF
4. Age and gender (typically presents in young adults)
5. Response to immunosuppression

The current treatment approach with - G-CSF, Immunosuppression (cyclosporine + dexamethasone), and Supportive care is appropriate and aligned with standard protocols for cyclical neutropenia. The recommendations for Follow-up include more frequent monitoring initially (weekly for first month), CBC with differential at each visit, prophylactic antibiotics during severe neutropenic periods, consider long-term G-CSF prophylaxis if cycles are confirmed.

XII. Prevalence and Patterns of Alcohol Use Among EDPA Physicians: A Cross-Sectional Study

Dr RPS Makkar, MBBS, MD, MBA
Senior Consultant Physician

Dr Anupam Singh, MD
Senior Consultant Physician

Background

Alcohol use among doctors, has not garnered enough attention in the past, however the quantum and nuances of problem needs to be studied better due to its potential implications for both personal health and professional responsibilities amongst doctors.

A 2020 cross-sectional study on alcohol use among allopathic doctors in India was published revealed some insights into their drinking habits and perceptions. Conducted among 235 respondents, the study found that 58% were occasional users, 24% were current users, and 18% were non-users.

A related question was raised in the Lok Sabha in December 2015 regarding the rising incidence of alcohol use among doctors in government hospitals and the measures being taken to address it. The Government clarified that since health is a State subject, no centralized data on such incidents is available.

Why this Study (study rationale)?

Based on this, we decided to conduct a first-of-its-kind (..*and fun* 😊!) study to assess alcohol use among our EDPA members. We hypothesized that a significant proportion of EDPA doctors use alcohol. The study was aimed to determine prevalence of alcohol use, describe consumption patterns, and examine any potential associations with demographics, practice characteristics, and health belief factors among the members.

Methodology and objective

A **Google online survey** was designed and circulated on WhatsApp among EDPA Physicians from Jan to Feb 2025, with an **objective** to identify and describe patterns of alcohol use, including amount, frequency, and duration. An additional objective was to examine associations , if any, between alcohol use and demographics, clinical practice characteristics, and health beliefs.

The **inclusion Criteria** included registered medical practitioners in EDPA with a valid medical license. Retired physicians, medical students, and those not practicing in East Delhi were excluded. The **Sample Size** was targeted at around 500 responses; with an expected 20% response rate (100 respondents).

Appropriate sensitivities and **ethical considerations** were taken into account while designing the survey t; an informed consent was obtained from all participants before they filled the Online form, and data was anonymized to ensure confidentiality. Participation was voluntary, with the option to withdraw at any time.

Questionnaire:

- **Demographics:** We collected demographic data of responders: Age, Sex, Marital status, Number of children, Years of practice, Type of clinical practice (private, government, academic), Clinical specialty were asked for in the questionnaire.
- **Alcohol usage questions**: Question related to alcohol use were included (e.g. patterns of alcohol use, *viz*. amount, average size, number of drinks, frequency, and duration; social setting of drinking etc)

Statistical Methods for Data Analysis:

We used statistics methods as below to analyse the data received.

- **Descriptive statistics**: Frequencies, means, and standard deviations to summarize demographic and alcohol use data.
- **Inferential statistics**: Chi-squared tests, t-tests, and logistic regression analysis to examine relationships between demographics, clinical practice characteristics, and health beliefs with alcohol use.
- **Multivariate analysis**: Multiple logistic regression analysis to identify independent predictors of alcohol use.

Responses received

- We received only 74 responses, representing a response rate of approximately 15% , against an expected response rate of 20%.

Summary of Key Findings & Insights from Statistical Tests and Relationships

1. **Alcohol Consumption Patterns**

   - **Current Users**:
     - 58% of respondents currently consume alcohol. Amongst these , 24% are current regular users (consuming alcohol weekly or more). 76% of respondents reported occasional alcohol use and have since quit.
   - **Non-Drinkers**:

- 31% do not drink (citing personal, cultural, or religious beliefs), and 11% were former drinkers.

- **Amount** :
  - Most users drink 2–3 drinks per sitting. A small minority (8%) consume four or more drinks per occasion.
- **Frequency**:
  - Occasional drinkers averaged monthly consumption, while regular users reported weekly patterns
- **Duration**:
  - Most alcohol users reported sustained use over 5–10 years.
- **Social Drinking**:
  - The survey suggested that alcohol consumption among physicians occurs mostly in social or peer-group settings rather than solitary habits.

2. **Age demographics vs Alcohol Consumption**
   - Among 74 respondents, average age was 53 years (median 54 years).The age range of participants spanned from 29 to 77 years.
     - *Younger doctors displayed higher alcohol consumption levels, emphasizing the need for awareness about healthy coping mechanisms.*
     - *A Generational Gap was seen in alcohol usage; younger physicians (under 40) were more likely to consume alcohol but less likely to drink regularly, compared to their older counterparts.*
3. **Gender vs Amount of Drinking**
   - 85.1% of respondents are male, while 14.9% are female. This indicates a strong male majority in the sample.
     - *Male physicians had a higher prevalence of alcohol use compared to females (64% vs. 42%), although the amount consumed did not significantly differ.*
     - *The observed male majority (85.1%) may also reflect the broader demographic distribution within the profession. (T-test);T-statistic: 0.968*
4. **Marital Status vs Alcohol use**
   - A significant 93% of respondents are married, while smaller proportions are widowed (3%), divorced (2%), single (1%), or preferred not to say (2%).
     - *There was no association of the marital status with alcohol consumption; the amount consumed did not significantly differ between married vs non married/widowed/divorced.*
5. **Years of Practice vs. Alcohol Consumption**
   - Most respondents had extensive experience, with: 31% practicing for 21-30 years; 28% practicing for 31-40 years; 19% practicing for over 40 years; Only 7% have 0-10 years of experience.

- *A moderate negative correlation was seen with years of practice (statistically significant) indicating that alcohol consumption decreases with years of experience (Correlation coefficient: -0.363; p-value: 0.0015 (Statistically significant)*

- *More experienced doctors tend to drink less than younger ones.* Senior physicians with over 30 years of practice tend to drink the least, possibly due to greater health awareness, lifestyle changes, or other unmeasured factors.

6. **Practice Type with Alcohol use**
   - Respondents work in diverse healthcare settings: 30% in private corporate hospitals; 24% in private nursing homes; 21% in private clinics; 25% in government hospitals.

     - *Alcohol use was more common among private practitioners compared to those in government or academic roles.*

7. **Qualification vs Alcohol usage**
   - 76% responders had MBBS + DNB/MD degree; 16% were DM (Doctorate of Medicine); 8% had an MBBS degree alone
     - *Amount or frequency of alcohol consumed did not significantly vary based on qualification level. (ANOVA); F-statistic: 1.471, p-value: 0.237 (Not statistically significant).*

     - *Postgraduates, super-specialists, and undergraduates seem to drink at similar levels.*

8. **Belief vs Behaviour**
   - 71% believe that alcohol is bad for health; 18% are neutral; 11% believe alcohol is not bad.

     - *There was some correlation that those who believe alcohol is bad for health are less likely to drink, but the relationship is not strong enough to be statistically significant. (Chi-square Test);Chi-square statistic: 5.243;p-value: 0.073 (Marginal significance)*

9. **Stress levels vs Drinking behaviour**
   - Among those who drink, 65.5% state their drinking is not related to stress; 20% say "maybe" and 14.5% confirm that their drinking is linked to work stress.

     - *This suggests that stress levels at work may have some impact on alcohol consumption, but the relationship is not very significant. (Chi-square Test);Chi-square value: 5.244;p-value: 0.073 (Marginal significance).*

     - *It suggests that stress per say may not be a primary factor driving drinking behaviour among doctors. Interestingly, physicians who use alcohol, perceived it as a stress-reliever, especially those with demanding clinical workloads. While only 14.5% linked alcohol use to work stress, this finding invites reflection on whether*

alternative stress management approaches (e.g., mindfulness, peer support) can benefit healthcare professionals.

10. **Seeking Help for Alcohol-Related Issues**
    - 98% of respondents have never sought help for alcohol-related issues; Only 2% reported seeking help or treatment.
        - *This may suggest a potential reluctance or under-recognition of issues related to alcohol use.*

Key Takeaways and Take-Home Learnings for EDPA Members

- **Education Campaigns:** Promote awareness of the health risks associated with alcohol use, emphasizing moderation and alternative coping mechanisms for stress. Highlighting alternative stress management techniques, such as mindfulness or exercise, could benefit some physicians who currently use alcohol as a coping mechanism.
- **Community Building:** Foster a supportive professional network within EDPA to address common challenges, reduce stress, and encourage peer discussions.
- **Addressing Barriers:** Create platforms to encourage open conversations around alcohol-related health issues and eliminate the stigma surrounding help-seeking behaviours.
- **Support Systems**: Establish peer-support groups within EDPA to offer a safe space for discussions about challenges faced by physicians, including stress and substance use.

Conclusion :

This survey highlights the prevalence and nuanced patterns of alcohol consumption among EDPA physicians. Although the number of responders is not very high, this survey provides directional /qualitative insights in understanding alcohol use pattern and highlights opportunities for improving professional well-being among EDPA physicians. By leveraging some of these insights, EDPA can continue supporting its members in creating healthier lifestyles and work environment

XIII. Newer antiepileptic drugs

Dr. Amit Batra, Associate Director , Neurology, Max PPG

INTRODUCTION

Epilepsy is a chronic neurological disorder that affects approximately 50–70 million people worldwide. Epilepsy has a significant economic and social burden on patients as well as on the country. Approximately 30% of epileptic patients do not achieve seizure control and 50% are adversely affected by the antiseizure drugs. Several new ASMs have recently been introduced to the market, making it possible to better tailor the treatment of epilepsy.

Advantages of the newer ASM include unique mechanism of action, better safety profile/lesser side effects, minimal drug interaction broad spectrum of efficacy. However, the cost of these drugs may be a prohibitive factor in resource poor countries like us.

ESLICARBAZEPINE

Indication:

Eslicarbazepine acetate was first approved by the FDA as adjunctive treatment for focal-onset seizures.

Mechanism of action

Eslicarbazepine acts by blocking sodium channels and stabilizing the inactive state of the voltage-gated sodium channel (NaV).

Pharmacokinetics

Eslicarbazepine is more than 50% is excreted in the urine as unchanged eslicarbazepine. The half-life is long - 13 to 20 hours in plasma and 20 to 24 hours in CSF, justifying once-daily dosing.

Dosage

The recommended starting dose is 400mg once daily, to be increased to 800 mg once daily after 1 week. If needed, the dose can be increased again to 1200 mg/d after 1 week.

Adverse effects

Eslicarbazepine acetate has adverse effects similar to oxcarbazepine, although less frequent. The most common dose-related adverse effects are dizziness, somnolence, headache, diplopia, nausea, vomiting, fatigue, and ataxia. Hyponatremia, rash and sedation and neuropsychological effects were less commonly reported than in oxcarbazepine trials, making it a suitable alternative to carbamazepine.

LACOSAMIDE

Indication

Lacosamide is effective against focal-onset seizures as well as generalized onset tonic-clonic seizures. It is not usually effective against generalized absence or myoclonic seizures, it has unique features including broad effectiveness, it has more seizure free days, long retention rate and no negative effect on cognition. Lacosamide is indicated as monotherapy or adjunctive therapy for focal seizures and as adjunctive therapy in the treatment of generalized tonic-clonic seizures in patients 4 years of age or older.

Mechanism of action

Lacosamide blocks sodium channels, enhancing slow inactivation, unlike most classic sodium channel blockers, which enhance fast sodium channel inactivation.

Pharmacokinetics

Oral bioavailability is excellent. Protein binding is not clinically significant. Lacosamide is converted in the liver to inactive metabolites, but approximately. 40% is eliminated unchanged in the urine. The half-life is approximately 13 hours.

Dosage-

It is available in oral as well as parenteral formulations. The starting dose is 100 mg/d (once at bedtime or in 2 divided doses) for 1 week, then 100 mg 2 times a day. The dose can then be titrated as needed by 100mg every 1 to 2 weeks until seizures are controlled, maximal total daily dose of 400- 600 mg/d.

Adverse effects

The most common possible adverse effects include dizziness, nausea, vomiting, diplopia, fatigue, and sedation. Lacosamide may produce a dose-dependent prolongation in PR interval, which could be clinically significant in patients with known cardiac conduction problems.

PERAMPANEL

Indication

Perampanel is indicated for focal seizures (adjunctive and monotherapy) with or without secondary generalization in patients aged ≥4 years, and as adjunctive treatment of GTCS in patients aged ≥12 years. Efficacy in Refractory Status epilepticus has also been reported with oral loading.

Mechanism of action

Perampanel has a unique MOA by its selective noncompetitive AMPA glutamate receptor antagonist action.

Pharmacokinetics

It is available as an oral preparation. It has excellent oral bioavailability and is 95% protein bound. It is extensively metabolized in the liver. It has a long half-life of about 105 hours (single daily dose)

Dosage

The starting dose is 2 mg/d for 1 to 3 weeks, then 4 mg/d. The dose can be increased further by 2mg every 3 weeks as needed, up to 8mg/d in monotherapy and 12 mg/d when used with an enzyme-inducing agent.

Adverse effects

The possible adverse effects of perampanel include dizziness, somnolence, headache, fatigue, ataxia, and blurred vision. Aggression, hostility and even suicidal ideation may occur, with an estimated incidence of about 20% at a dose of 12 mg/d. It is s not recommend to be used in pregnant women.

BRIVARACETAM

Indications:

Brivaracetam is FDA approved for the treatment of partial-onset seizures in patients 4 years of age and older. This indication includes monotherapy and adjunctive use of the drug.

Mechanism of action

Brivaracetam is structurally related to levetiracetam and has a similar mechanism of action through binding to SV2A but with approximately 20-fold higher affinity and greater selectivity. It also has a higher brain permeability than levetiracetam and acts minimally on the AMPA receptors (hence less behavioral side effects)

Pharmacokinetics

Brivaracetam has excellent bioavailability after oral administration. It is weakly bound to plasma proteins. Its half-life is approximately 7 to 8 hours. It is renally excreted after extensive metabolism. Brivaracetam has more interactions than levetiracetam. Its clearance is increased by enzyme inducers.

Dosage

It is available in oral and IV formulations. The recommended starting dose is 50mg 2 times a day to a maximal dose of 200-300mg/day.

Dose reduction is not required in renal impairment. No overlap is needed for oral switch from levetiracetam to brivaracetam (ratio 1: 10)

Adverse effects

The most commonly reported adverse experiences are somnolence, dizziness, and fatigue, irritability in some and significantly less behavioral/ psychiatric adverse effects unlike Levetiracetam. Its safety in pregnancy has not been established. is not recommend to be used in pregnant

CANNABIDIOL

Indication

Cannabidiol is FDA indicated as an adjunct for the treatment of refractory seizures associated with Lennox-Gastaut syndrome, Dravet syndrome, or tuberous sclerosis complex in patients 1 year of age and older. It is a cannabinoid but does not interact with the cannabinoid receptor CB1 and does not share the psychoactive properties of tetrahydrocannabinol.

Mechanism of action

Its exact mechanism of action is not known, but it may enhance GABA activity through allosteric modulation of the GABAA receptor and enhancement of currents elicited by low GABA concentrations. It may also play a role in modulation of intracellular calcium.

Pharmacokinetics

Its bioavailability is increased by administration with a high-fat meal. It is highly protein bound (>94%). It has a half-life ranging from 18-32 hours. Cannabidiol is metabolized in the liver, primarily by CYP2C19 and CYP3A4 enzymes, and converted to an active then inactive metabolite. Its clearance is increased by inducers and decreased by inhibitors of CYP2C19 and CYP3A4 Cannabidiol is available only as an oral solution.

Dosage

The recommended starting dose is 5mg/kg/d in 2 divided doses for 1 week, to a maximal dose up to 10 mg/kg/d in 2 divided doses.

Adverse effects

Its most common possible adverse effects are sedation, fatigue, decreased appetite and diarrhea. It may produce an increase in liver enzymes, particularly when used in conjunction with valproate and clobazam. It interacts with several antiseizure medications, most notably with clobazam, increasing the concentration of its active metabolite N-desmethylclobazam.

CENOBAMATE

Cenobamate was FDA approved for the treatment of focal-onset seizures in adults in November 2019 and was marketed as of May 2020. It is indicated for adjunct treatment of partial-onset seizures in adult patients 18 years of age or older. Its efficacy as adjunctive therapy was exceptional, with higher seizure-free rates than reported with any other antiseizure medication in the past 30 years.

Mechanism of action

Cenobamate is an alkyl-carbamate with two mechanisms of action: blocking the sodium channel, preferentially attenuating the persistent sodium current, and enhancing GABA activity through positive allosteric modulation of the GABA A receptor at a non-benzodiazepine binding site.

Pharmacokinetics

Cenobamate has very good oral bioavailability of approximately 88%. Its protein binding of 60% is not clinically relevant. It is extensively metabolized by glucuronidation and oxidation. Its half-life is 50 to 60 hours, justifying once-daily dosing. Its concentration is reduced by enzyme inducers. It is an inhibitor of CYP2C19, reducing the clearance of phenytoin,

phenobarbital, and the active metabolite of clobazam. Mild-to-moderate and severe renal impairment and those with mild-to-moderate hepatic impairment should be treated with reduced dose. Not recommended in patients with ESRD on HD / severe hepatic impairment.

Dosage

Starting dose is 12.5 mg/d for 2 weeks, 25 mg/d for 2 weeks, 50 mg/d for 2 weeks, and then 100 mg/d. After that, dose can be increased as needed by 50 mg @ 2 weeks, up to 400 mg/d.

Adverse effects

The most common possible adverse effects were somnolence, dizziness, and fatigue. It may also cause shortening of the QT interval, low-to-moderate serum aminotransferase elevations. Tremors, depression and suicidal thoughts are also reported. DRESS (drug rash with eosinophilia and systemic symptoms) syndrome occurred rarely (< 0.1%).

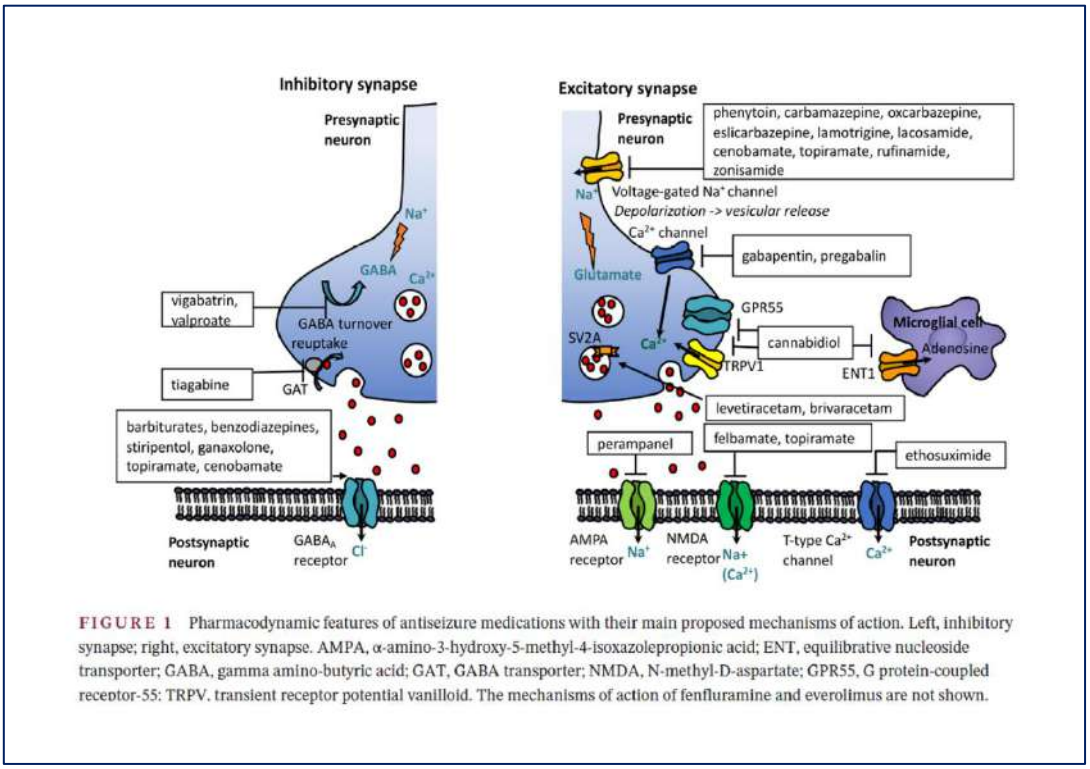


FIGURE 1 Pharmacodynamic features of antiseizure medications with their main proposed mechanisms of action. Left, inhibitory synapse; right, excitatory synapse. AMPA, α-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid; ENT, equilibrative nucleoside transporter; GABA, gamma amino-butyric acid; GAT, GABA transporter; NMDA, N-methyl-D-aspartate; GPR55, G protein-coupled receptor-55; TRPV, transient receptor potential vanilloid. The mechanisms of action of fenfluramine and everolimus are not shown.

Fig: Taken from: Johannessen Landmark C et al: Pharmacological aspects of antiseizure medications: From basic mechanisms to clinical considerations of drug interactions and use of therapeutic drug monitoring. Epileptic Disord. 2023 Aug;25(4):454-471.

Conclusion:

The introduction of so many newer AEDs has strengthened our hands in our fight against epilepsy. But still nearly 25% patients remain medically refractory. Hence research on newer targets, newer delivery systems and focusing on epileptogenesis rather than just controlling seizures is the need of the hour.

XIV. Violence Against Healthcare Professionals (HCPs) – what to do in a hostile situation?

Dr RPS Makkar, MBBS, MD, MBA

As a follow up to an article on a similar topic on "**Handling Violence Against Doctors**"- **Time for a Standard Operating Procedure within EDPA**", that was published in the July – Sep 2024 issue of EDPA Quarterly Bulletin, Dr Vinay Agarwal (Pushpanjali Hospital) suggested me to deliver a talk to highlight this issue and bring it to further attention of medical fraternity on this pressing issue of violence against healthcare workers. He advised me to deliver this talk at the Pushpanjali Study Circle CME on 7th February. I was grateful for this opportunity and used the opportunity to focus on what HCPs can do to address violence against doctors and how to handle such situations.

The talk included and exploration of the *definition*, *types*, and the wide-ranging *impact* of violence on HCPs. Alarmingly, it is observed that 75% of doctors in India experience some form of verbal, physical or mental violence from patients or their families during their professional careers.

Key contributing factors that lead to such unpleasant and hostile circumstances include:

- **Physician Factors** (Lack of communication/ Improper communication Miscommunication ; Lack of empathy in communication)
- **Patient Factors** (Demanding patient/family; Patient dissatisfaction on treatment or diagnosis leading to anger against doctors if not met)
- **Societal Factors** (Societal 'distrust' in medical profession; Viewing healthcare as a 'transactional' service; Lack of "health literacy" in society; era of 'Infodemic'/Google doctor)
- **Healthcare Burden Factors** (Overburdened health system/Low health budget; High costs of Rx; Inadequate "security measures / lack of deterrent measures)

The talk emphasized the importance of recognizing *potential triggers* for violence and shared vital strategies for *pre-emptive and preventive measures* to help avoid such situations.

It included some simple , high-level recommendations to Address Violence Against Doctors, besides also providing specific and step-wise guidance on what to do when one encounters such a potentially aggressive situation:

1. Systemic and Cultural Changes: A multi-pronged approach involving the government, society, and the medical community is essential to achieve mid- to long-term solutions.
2. Establishment of SOPs and Safety Protocols: Hospitals must adopt strict safety measures to protect their staff.
3. Proactive Role of Administration: Medical associations and hospital administrations need to actively improve safety and security standards for healthcare professionals.
4. Enhanced Communication Skills Training: Equipping doctors with better communication skills to manage sensitive patient interactions.
5. Public Sensitization: Public awareness campaigns are essential to reduce instances of violence against HCPs.
6. Stricter Laws and Enforcement: The *Healthcare Service Professional and Clinical Establishments (Prohibition of Violence and Damage to Property)* Draft Bill of 2019, along with the BNS Act, was highlighted. These legislative measures are critical to deter offenders and provide justice to victims.

The talk underscores that tackling violence against doctors requires a collective effort. With systemic changes, improved hospital protocols, public education, and stricter enforcement of laws, we can create a safer working environment for healthcare professionals.

The session served as a wake-up call for the medical community to address this grave issue with urgency and unity.

Below are the slides that are free to be used by the EDPA members and readers as appropriate.

"Violence Against Doctors & Healthcare Professionals"

Understanding the Issue, Strategies for Prevention & Time for a Standard Operating Procedure

Dr RPS Makkar
MD Medicine, MBA
Senior Consultant, Makkar Hospital

Violence Against Doctors (VAD): Definition, Types and Impact of Violence

Definition of Workplace violence:

"situations where staffs are ***ill-treated, intimidated or attacked*** in conditions linked to their workplace, including commuting to and from the workplace, involving an explicit or implicit challenge to their safety, well-being or health" - *(WHO framework Guidelines (2002)*

Bhartiya Nyaya Sanhita (BNS) Act, 2023

*The BNS defines **violence against HCPs in clear terms**, categorizing it as any act of physical harm, threats, or intimidation directed towards them while they perform their duties.*

Types of Violence faced by Doctors

- **Physical Violence:** Assaults, hitting, or causing physical harm
- **Verbal Abuse:** Threats, intimidation, yelling, or insults
- **Psychological Violence:** Harassment, bullying, or coercion
- **Sexual Harassment:** Unwanted sexual advances or behaviors
- **Cyberbullying:** Online threats or defamatory posts targeting HCPs.

Impact of this violence :

- **Physical Injuries on HCPs**
- **Mental Trauma**
  - ✓ Increased stress, sleep disturbances, low self esteem, anxiety, anger, depression, and PTSD
  - ✓ decreased job dissatisfaction, more leave days, leave profession, move abroad (brain drain), **Burnout**
- **Loss of property/**
- **Disruption Of Healthcare Services/ Negative impact on Quality of care**

Violence against Drs: *~75% of doctors face workplace violence in India*

Global:

- Healthcare workers are **4 x more likely to be assaulted** than other professionals in the general workplace,
- Up to 38% of HCPs face physical violence at some point in their careers; **incidents are grossly underreported** (WHO);
- High prevalence in countries with low doctor-patient ratios;
- Incidents have ↑ significantly in recent years, **regardless of the income and wealth levels** of countries. (*World Medical Association*)
- **Reported from all countries:**
  - **USA, Canada, Australia,**
  - **UK, Europe,**
  - **China, South Asia**
  - **Africa**

Reports and news on violence among physicians in some countries[6, 10, 12, 14, 15, 16, 17, 18, 20, 54]

Country	Prevalence of violence against physicians (%)	Time period
Bulgaria (General)[*]	55.0	N/A
China (Emergency Service)[*]	90.0	One year
Germany (Primary Care Physicians)[*]	91.0	Career-time
India (General)[*]	77.3	Career-time
Italy (General)[*]	51.5	One year
Jordan (General)[*]	63.0	One year
Peru (General)[*]	84.5	N/A
Poland (General)[*]	51.0	N/A
Romania (Resident Physicians)[*]	45.8	Career-time
Turkey (General)[*]	84.0	Career-time
USA (Emergency Service)[*]	47.0	Career-time

N/A: non-applicable.
[*]Reports by National Chambers/Medical Associations.
[#]Results of research.

Data from Various Countries

WHO: 4 out of every 10 HCPs are victims of physical violence at least once in their career

India:

- ~75% of doctors face workplace violence (verbal abuse/Physical attacks) at least once in their lifetime (**IMA study, 2019**);
- **Accounts for 3.4% of the global incidents** of VAHCW, though India contributes to <1% of the global HCWs.
- Incidence: 3 incidents / 10,000 HCWs (**5 X global rate; 57 X UK rate**).
- Most incidents occur in emergency departments and ICUs.; during peak hours; mostly involve attendants
- **70–80% of incidents are never reported**
- **< 10% of the cases logged reach the courts.**

1. Workplace Violence in Healthcare, 2022: WHO Report
2. Nair A, Zaidey S. Ending violence against healthcare workers in India: A bill for a billion. Lancet Reg Health Southeast Asia. 2022 Aug 19; 6:100064.

2022, Doctor-son duo thrashed for opening clinic late in Maharashtra

Ballari: Lady doctor slapped in Covid ward

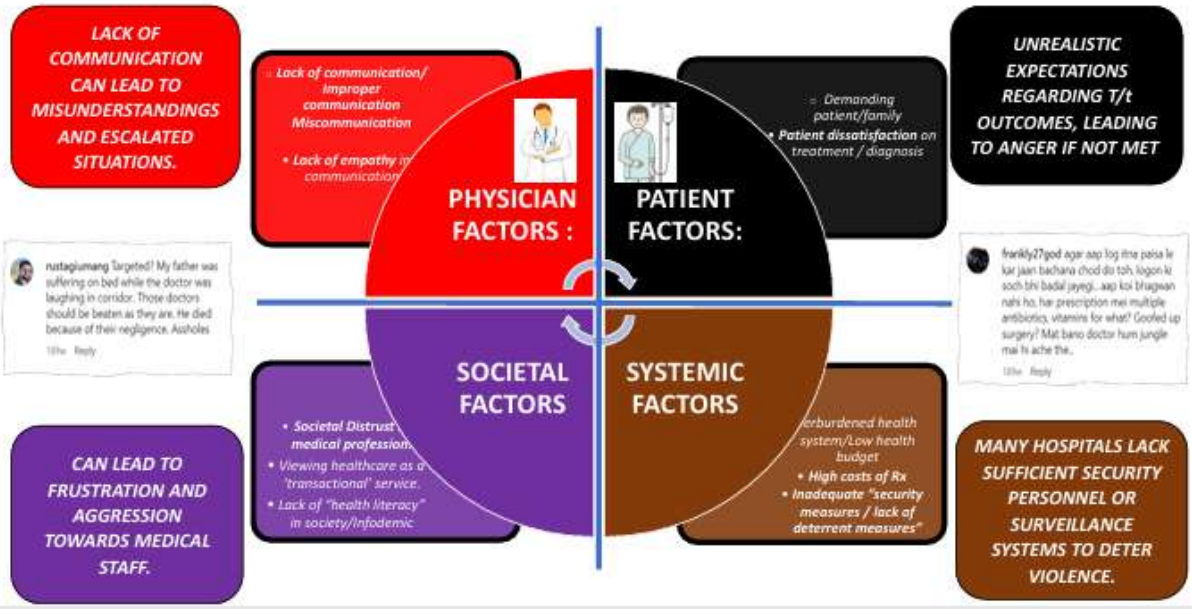
आरोपी मरीज ने न्यूरो सर्जरी के अध्यक्ष डॉ. मदनमन सिंह चंदाड़ा पर हमला किया

2024, Gujarat, Doctor Thrashed For Asking Patient's Family To Remove Slippers

2019, Assam, , a senior resident doctor beaten up to death for allegedly being absent from duty and blamed for the death of a temporary worker

Jaipur: Doctor gets badly beaten up by relatives of patient who died while undergoing treatment

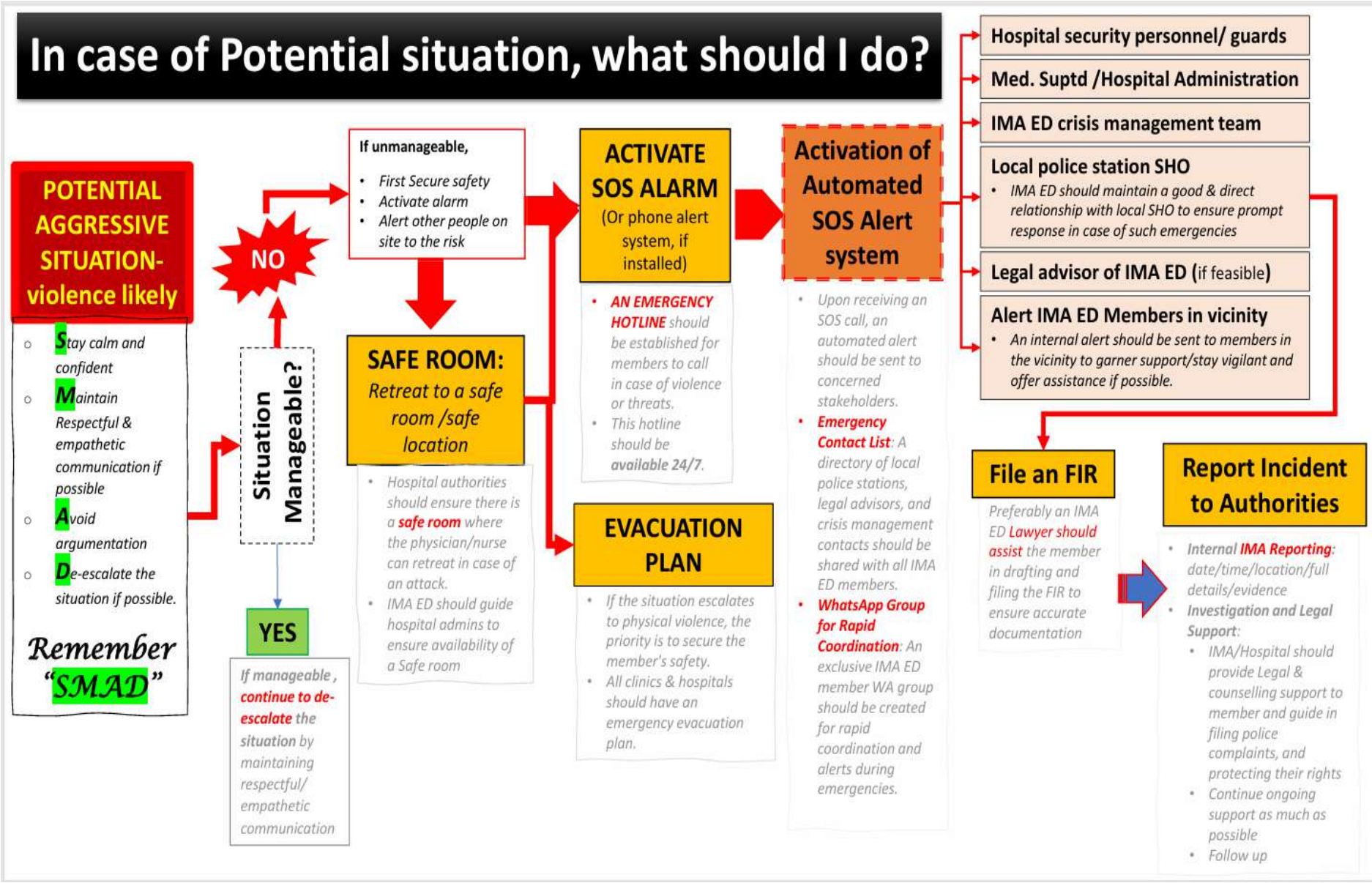
Understanding the issue: Key factors contributing to violence on HCWs



‘Potential Triggers’ that healthcare staff need to be aware of:

****RED FLAGS****

- *Sudden **Death** of an admitted patient/ UNPREPARED FAMILY*
- *Sudden **Worsening of condition** of an admitted patient*
- ***Inebriated** patient/attendants*
- ***Psychological** patient/manic*
- *Financial stress: **High Billing** @ time of discharge*
- *Crowded OPD/**Long waiting** durations*
- ***Younger Drs /untrained staff** on ER /ICU duty*
- ***Dissatisfaction** with care provided*
- ***Unpredictable triggers/Minor frustrations***


In case of Potential situation, what should I do?
POTENTIAL AGGRESSIVE SITUATION- violence likely
Stay calm and confident
Maintain Respectful & empathetic communication if possible
Avoid argumentation
De-escalate the situation if possible.
Remember "SMAD"
Situation Manageable?
NO
YES
If manageable, continue to de-escalate the situation by maintaining respectful/ empathetic communication
If unmanageable,
First Secure safety
Activate alarm
Alert other people on site to the risk
SAFE ROOM: Retreat to a safe room /safe location
Hospital authorities should ensure there is a safe room where the physician/nurse can retreat in case of an attack.
IMA ED should guide hospital admins to ensure availability of a Safe room
ACTIVATE SOS ALARM (Or phone alert system, if installed)
AN EMERGENCY HOTLINE should be established for members to call in case of violence or threats.
This hotline should be available 24/7.
EVACUATION PLAN
If the situation escalates to physical violence, the priority is to secure the member's safety.
All clinics & hospitals should have an emergency evacuation plan.
Activation of Automated SOS Alert system
Upon receiving an SOS call, an automated alert should be sent to concerned stakeholders.
Emergency Contact List: A directory of local police stations, legal advisors, and crisis management contacts should be shared with all IMA ED members.
WhatsApp Group for Rapid Coordination: An exclusive IMA ED member WA group should be created for rapid coordination and alerts during emergencies.
Hospital security personnel/ guards
Med. Suptd /Hospital Administration
IMA ED crisis management team
Local police station SHO
IMA ED should maintain a good & direct relationship with local SHO to ensure prompt response in case of such emergencies
Legal advisor of IMA ED (if feasible)
Alert IMA ED Members in vicinity
An internal alert should be sent to members in the vicinity to garner support/stay vigilant and offer assistance if possible.
File an FIR
Preferably an IMA ED Lawyer should assist the member in drafting and filing the FIR to ensure accurate documentation
Report Incident to Authorities
Internal IMA Reporting: date/time/location/full details/evidence
Investigation and Legal Support:
IMA/Hospital should provide Legal & counselling support to member and guide in filing police complaints, and protecting their rights
Continue ongoing support as much as possible
Follow up

Pre-emptive/Preventive Measures to Reduce Violence

PREVENTIVE MEASURES:

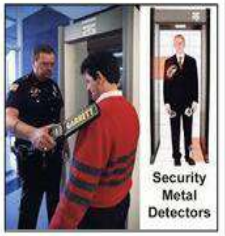
- ✓ **Security**: Increase security in hospitals (CCTV, guards, metal detectors).
- ✓ **Training:** training staff in conflict resolution, de-escalation, and communication skills.
- ✓ **Communication**: Strengthening doctor-patient relationships through better communication.

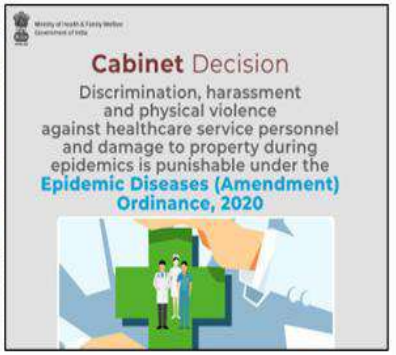
LEGISLATIVE ACTIONS:

- ✓ **Penalties**: Enforcing strict penalties for violence against HCPs.
- ✓ **Laws**: Implementing specific healthcare protection laws; fast courts; mandatory insurance; consider a separate **Central Law** top protect Drs

PROMOTING PUBLIC AWARENESS /MEDIA SUPPORT:

- o **Public Education**: Educating public on challenges faced by HCPs.
- o Determining special days that draw attention to violence and increase awareness





Recommendations to ↓ incidences of violence against doctors

HOSPITAL-LEVEL INTERVENTIONS:

- **Enhanced security:**
  - ✓ Deploying trained security personnel,
  - ✓ installing CCTV cameras,
  - ✓ Set up helplines for reporting and support.
  - ✓ Establish crisis management teams
  - ✓ Create & implement clear security protocols
  - ✓ Conduct training workshops for staff
  - ✓ Rehearse emergency response protocols.
- **Patient flow management:**
  - ✓ Streamlining appointment systems,
  - ✓ Reducing waiting times,
  - ✓ Improving patient registration processes.
- **Complaint redressal system:**
  - ✓ Establishing a clear and accessible grievance redressal system for patients to raise concerns and address complaints.
- **Communication trainings:**
  - Communication skills training for Drs/Nurses
- **Patient education campaigns:**
  - ✓ Raising awareness among patients about the challenges Dr/ Nurses face
  - ✓ Promoting respectful communication.

DOCTOR LEVEL INITIATIVES:

- **Develop Communication skills**
  - ✓ Empathy, Transparency, honest communication, Daily updates
  - ✓ Providing adequate time for consultation
- **De-escalation techniques:**
  - ✓ Learn de-escalation techniques to manage potentially volatile situations.
- **Teamwork / support systems:**
  - ✓ Fostering a collaborative work environment where colleagues support each other during challenging situations.
- **Mental health support:**
  - ✓ Providing access to mental health services for healthcare professionals to manage stress and burnout.

LEGISLATION LEVEL CHANGES

- **Stricter laws:**
  - ✓ Enforcing strict penalties for violence against HCPs.
  - ✓ Implementing specific healthcare protection laws (e.g., the "Healthcare Service Personnel and Clinical Establishments Act" in India).
  - ✓ Advocate for HCP safety policies and legislation.
- **Dedicated healthcare courts:**
  - ✓ Establishing specialized courts to expedite cases related to violence against medical professionals.
- **Insurance coverage:**
  - ✓ Exploring mandatory insurance policies for healthcare providers to cover costs associated with violence.

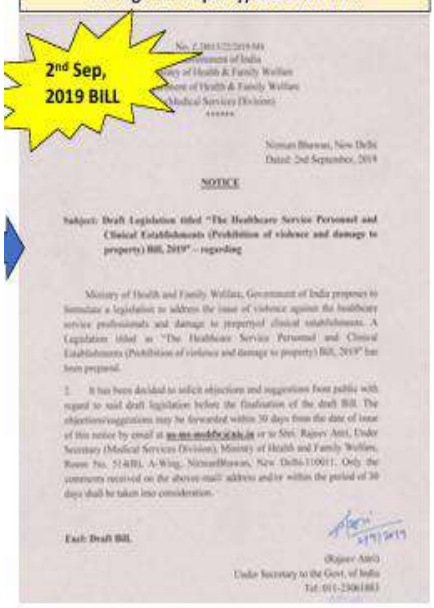
PUBLIC AWARENESS CAMPAIGNS

- **Media outreach:**
  - ✓ Responsible media coverage
  - ✓ Avoiding the spread of provocative information
  - ✓ Increasing the news on penalties against violent incidents
- **Community engagement:**
  - ✓ Collaborating with community leaders and organizations to spread awareness and encourage respectful behavior towards healthcare providers.

- ✓ Determining special days that draw attention to violence and increase awareness

Legislation: Healthcare Service Professional and Clinical Establishments (Prohibition of Violence and Damage to Property) 2019 draft bill

Healthcare Service Professional and Clinical Establishments (Prohibition of Violence and Damage to Property) 2019 draft bill



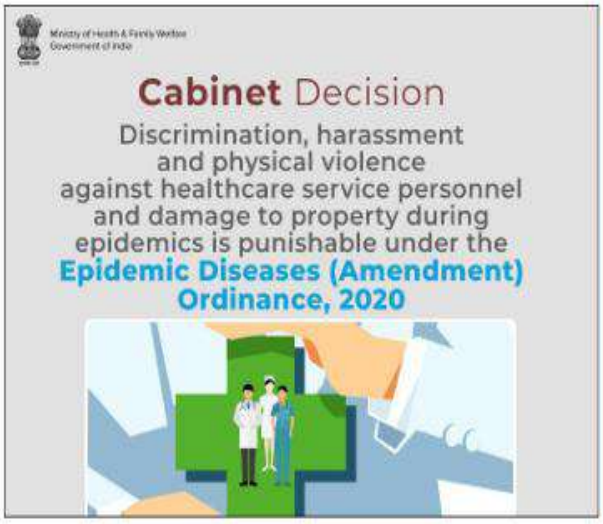
Status

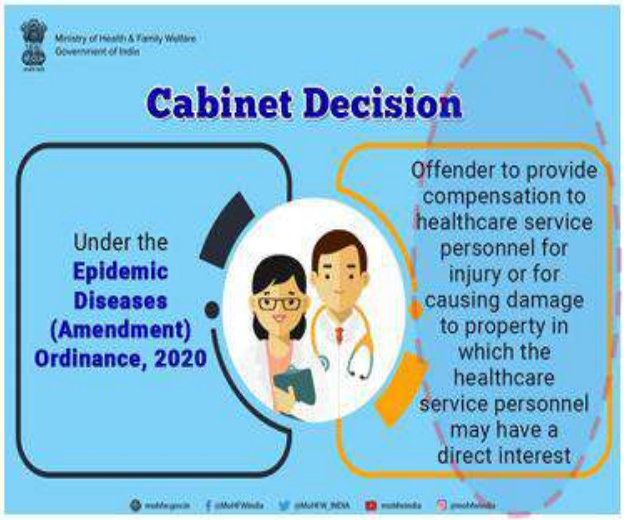
- ..any violence against healthcare workers is a non-bailable offence (*except in Chhattisgarh*) and can lead to 3 years of imprisonment (*except in Arunachal Pradesh, Punjab, Tamil Nadu, and Puducherry*), with a fine of up to 50 000 rupees (except in Arunachal Pradesh, Delhi, Haryana, Himachal Pradesh, Tamil Nadu, and Puducherry).
- 4 states and 5 UTs in India still have no law to tackle violence against healthcare workers.
- Even where legislation is in place, it's been reported <10% cases logged under this act reached the courts after charges were filed.
- Despite widespread recognition of the problem and several calls from medical associations, ***there is still no national legislation in place***.

Solving systemic violence against healthcare workers in India
October 4, 2021

thebmjopinion

Legislation: Epidemic diseases (Amendment) Ordinance 2020





- **The Bill addressed violence against HCPs at the national level. But never became a law.**
- **Epidemic diseases (Amendment) Ordinance came during covid 19.**

BNS Act 2023 includes strict penalties for Violence Against Doctors

The **Bhartiya Nyaya Sanhita (BNS) Act, 2023** includes specific provisions regarding crimes and violence against HCPs.

1. **Increased Penalties**:
   - **Imprisonment**: for up to 7 years for serious offenses against doctors and healthcare workers.
   - **Fines**: Monetary penalties also included.
2. **Specific Offenses**:
   - Law outlines specific offenses related to violence against HCPs, including:
     - Physical assault,
     - Verbal abuse,
     - Intimidation, and
     - Damage to property in healthcare settings.
3. **Fast-Track Courts**:
   - Proposes establishment of fast-track courts to handle such cases
4. **Grievance Redressal Mechanism**:
   - Emphasizes need for an effective grievance redressal mechanism to address complaints from healthcare workers.
5. **Awareness and Training**:
   - Emphasizes creating awareness among the public regarding the rights of HCPs and the consequences of violence against them.
6. **State Responsibilities**:
   - onus on state governments to provide a safe working environment for healthcare workers.

	CRIME	CRIME DEFINED UNDER BHARATIYA NYAYA SANHITA	RELEVANT SECTION OF BNS	PUNISHMENT
1	Use of Abusive language/ Misbehaviour with doctor	Intentional insult in any manner(with intent to provoke breach of the peace)	352	2 years imprisonment + Fine
2	Causing injury or hurt to Doctor or Medical staff	Voluntarily Causing hurt (by dangerous weapons)	115, 116, 117, 118	3 to 7 years imprisonment + Fine
3	Threat to Doctor or Medical Staff	Criminal intimidation	351(2)	2 years imprisonment + Fine
4	Attack on Govt Doctor / Govt Medical Staff	Voluntarily causing hurt or grievous hurt to deter public servant from his duty.	121(2), 224	3 to 10 years imprisonment + Fine
5	Damage to Hospital, Property and equipment	Mischief, and causing damage	324 (4), (5), (6)	2 to 5 years imprisonment + Fine (3 times of the cost)
6	Mob Attack / Forceful Entry into the Hospital	House-trespass / unlawful assembly / criminal trespass (with deadly weapon)	189, 190, 329, 330, 331, 332, 333	1 to 7 years imprisonment + Fine
7	Attack and harassment to lady doctor	Assault or use of criminal force to woman with intent to outrage her modesty	74	1 to 5 years imprisonment + Fine
8	Wrong or defamatory news posting against a doctor or hospital in newspaper or social media	Defamation	356(1), (2)	2 years imprisonment + Fine

2024 National Task force : *"no need for a separate Central Law for violence against drs"*

Central Law For Violence Against Doctors NOT Required! Says SC-Appointed Task Force

Written By Barsha Misra Published On 16 Nov 2024 1:22 PM | Updated On 16 Nov 2024 3:12 PM

- ***National Task Force constituted in 2024 (after Kolkata RG Kar rape & murder case).***
- ***Opined there is "no need for a separate Central law" to address c/of Violence on Drs***
- ***Suggested that the BNS 2023 can handle heinous offences against Drs***

DMA AT WORK on this issue:

Follow up action on meeting with Delhi Police Commissioner, Mr. Sanjay Arora on 20th January

Dr Alok Bhandari, President , **Dr Girish Tyagi** , President Elect, And **Dr Prakash Lalchandani**, Secretary* met Smt Chhaya Sharma ji , spl CP Delhi police* and discussed following issues-

- *All police stations will be sensitized to file institutional FIR in case of violence in hospitals.*
- *All SHO / Add SHO will be sensitized to book cases of medical violence under "prevention of violence and damage to property act 2008", and not under simple law and order sections.*
- *Display of all important district police officials and distress numbers in emergency of hospitals*
- *Initiation of "self defense workshops" for female work force of various hospitals and nursing homes.*
- *Proper protocol will be followed by police deptt before arrest of any doctor esp in medical negligence and PNDT cases.*
- *Advisory on safety audits of hospitals will be issued .*

DMA and Delhi police is committed to safety of medical workforce

Delhi Police Commissioner, Mr. Sanjay Arora

Summary

- Rise in violence against doctors in India is a serious concern.
  - Mid to long term Solution requires systemic and cultural changes; A multi-pronged approach is crucial.
- **SOPs and safety protocols** should be established.
- Hospital administration and Medical Association should work proactively towards improving safety & security of all its members.
- Communication skills trainings for HCPs needs to be improved.
- Sensitization of public is essential to reduce these incidences.
- Stricter laws by Govt are needed and implemented for punishing offenders and deterrence.

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XV. WHO at a Crossroad: The Global Health Crisis Triggered by U.S. Funding Cuts

Dr. S.K. Gupta Senior Medical Correspondent, Global Health Analyst, and Senior EDPA Member

Introduction

The World Health Organization (WHO), the global health body responsible for disease control, pandemic preparedness, and public health initiatives, faces an unprecedented funding crisis following the withdrawal of financial support from the United States. This abrupt loss threatens to undo decades of progress in combating diseases such as malaria, HIV/AIDS, tuberculosis (TB), and in maintaining immunization programs.

Despite initial indications that WHO might explore alternative funding mechanisms, the organization remains largely silent on its strategic plan, failing to provide clarity on engaging global leaders, restructuring finances, or diplomatic negotiations with the U.S. This editorial examines the implications of the U.S. funding withdrawal, WHO's response, and the urgent need for structural reforms to ensure financial stability and global health independence.

The Scale of the Crisis: How U.S. Funding Supported Global Health

For the past two decades, the United States has been the largest donor to WHO, funding critical programs that have saved millions of lives worldwide. The abrupt cessation of U.S. funding is not just an economic setback but a humanitarian crisis, threatening to derail disease prevention, treatment, and research efforts.

1. Malaria Control: A Potential Reversal of 15 Years of Progress

Over the past two decades, U.S. funding has contributed to preventing approximately 2.2 billion malaria cases and delivering millions of malaria vaccine doses, saving countless lives.

If the funding gap is not filled, WHO estimates an additional 15 million malaria cases and 107,000 malaria-related deaths in 2025, reversing 15 years of progress.

2. HIV/AIDS Programs: The Risk of a Resurgence

The U.S. has historically funded HIV/AIDS treatment, surveillance, and prevention in over 50 countries. Eight countries are already experiencing medication shortages, with more expected in the coming months.

If the funding cuts persist, there could be 10 million additional HIV infections and 3 million HIV-related deaths, undoing 15 years of progress.

3. Tuberculosis (TB) Control: A Setback in the Fight Against TB

TB treatment programs across 27 Asian and African countries face severe disruptions. WHO estimates that global TB efforts have saved approximately 2 billion lives over the past 20 years. With funding withdrawn, nine countries are struggling to continue diagnosing and treating TB patients.

4. Measles, Rubella, and Emerging Infectious Diseases

Over 700 laboratories worldwide depend entirely on U.S. funding for measles and rubella surveillance. Since 1974, measles vaccinations have saved nearly 94 million lives. The funding cuts come at a time when measles is resurging globally, with 57 outbreaks recorded in the past year alone.

5. Impact on Polio, Influenza, and Other Public Health Emergencies

WHO's programs for polio eradication, avian influenza, and other infectious diseases face critical setbacks. The reduction in funds could lead to a re-emergence of vaccine-preventable diseases, erasing decades of progress.

WHO's Response: Reprioritization but No Clear Funding Strategy

Despite the gravity of the crisis, WHO has not provided a transparent financial plan for sustaining global health initiatives in the absence of U.S. funding.

1. Budget Reorganization and Cost Cutting

- WHO has announced efforts to reprioritize resources and cut costs but has not outlined specific measures or timelines.

2. Lack of Diplomatic Engagement with the U.S.

- Although the U.S. funding withdrawal was expected, WHO has not engaged in visible diplomatic efforts to negotiate a phased or partial continuation of funds.

3. Silence on Alternative Funding Mechanisms

- WHO had previously mentioned crowdsourcing and engaging new donor nations as potential solutions, but no concrete steps have been outlined.

4. Urging Other Countries to Increase Health Spending

- Dr. Tedros urged other WHO member nations to increase health spending, but no significant commitments have been announced yet.

The Bigger Picture: WHO's Structural Weaknesses Exposed

1. WHO's Over-Reliance on Political Donors

- The funding crisis highlights WHO's vulnerability to political decisions by a few major donors. A world-class health organization should not be at the mercy of geopolitical funding decisions.

Fig: Contributed by Dr NP Singh, EDPA member

2. Need for a More Independent Funding Model

- A sustainable solution requires diversifying WHO's funding sources, including:
- ✓ G20 nations contributing a fixed percentage of their GDP to WHO.
- ✓ Public-private partnerships for disease control.
- ✓ A dedicated Global Health Fund with long-term financial commitments.

3. Addressing U.S. Concerns About WHO's Governance

- The U.S. justified its funding cuts citing WHO's lack of transparency, inefficiencies, and delayed response to COVID-19. Addressing these concerns through governance reforms is critical for restoring donor confidence.

Conclusion: A Call for Global Health Independence

- The withdrawal of U.S. funding is not just a financial issue but a defining moment for global health governance. If WHO fails to take decisive action, millions of lives could be at risk.

Key Recommendations:

- ✓ Engage Heads of State: WHO must engage heads of state to restart dialogue with the U.S. for phased or partial funding continuation.Mobilize Alternative Funding Sources: Alternative funding sources must be mobilized, including G20 nations and private partnerships.
- ✓ Implement Transparency and Governance Reforms: Greater transparency and governance reforms are necessary to restore global confidence.
- ✓ Establish a Permanent Global Health Fund: A permanent Global Health Fund should be established to ensure financial stability.

WHO cannot afford to remain politically vulnerable.

XVI. NIMHANS RAAH- Directory of mental healthcare centres and professionals across India.

Background

Mental illnesses and developmental disabilities are common. Individuals with these conditions and their families do not have easy access to information regarding professionals and facilities. Information about care centers including clinics, hospitals, de-addiction centers, centers addressing different needs of persons with developmental disabilities (e.g., special schools, vocational training centers, etc.), and mental health professionals is not available at one source. This causes delay in availing care, and, in some cases, total lack of care. All persons with mental illness and their families have the right to be informed about the mental healthcare services. Mental health is a topic rarely spoken about in social circles, making it difficult for those who want to seek help to know where to turn to. Easy availability of a directory of mental healthcare centers will help the needy to access and avail services on time.

NIMHANS RAAH:

National Institute of Mental Health & Neurosciences (NIMHANS), Bengaluru has created a directory to fill the gap in information regarding mental healthcare centers and professionals. The word **RAAH** is an Urdu word meaning ***"the path"***. NIMHANS RAAH is a one-stop, freely accessible, **online mental healthcare directory of information regarding mental healthcare centers and professionals**. We expect NIMHANS RAAH to play a significant role in providing **information about mental healthcare centers and professionals across India**.

NIMHANS RAAH's initiative helps to simplify access to mental healthcare, addressing one of the crucial barriers faced by physicians. It not only supports them in fulfilling their responsibilities but also strengthens the overall healthcare framework. General physicians in

EDPA can leverage this directory to bridge the mental health care gap, offering more comprehensive and effective patient support.

Who can use it?

Anyone who is looking for mental healthcare services available in India such as:

- Individuals in need of mental healthcare
- Caregivers of persons with mental illness
- Mental health professionals anywhere from India

How does it work for information seekers?

You can then browse the results and choose from the list. You can also apply different filters. It has been made that simple! In the 'Organization', sub-category 'Private' includes private hospitals, rehab centers, daycare centers, de-addiction centers, vocational training centers etc.

How can Professionals / Organizations contribute?

For **registering organizations / professionals**, please go to **LOGIN page** and follow the procedure given below:

How can EDPA members benefit from this?

The NIMHANS RAAH directory is a transformative resource that can greatly aid general physicians in the East Delhi Physician Association (EDPA) and other such associations, particularly when addressing mental health concerns within their patient populations.

Here's how it can help:

1. **Improved Referrals:** General physicians often encounter patients presenting with mental health issues, but referring them to the right specialist can be challenging due to a lack of

directory resources. NIMHANS RAAH provides a comprehensive, verified list of mental healthcare professionals and centers, enabling more precise referrals.

2. **Accessible Mental Health Support:** The online, freely accessible nature of NIMHANS RAAH ensures that physicians have instant access to information about mental health services across India. This is especially useful for patients requiring care in regions outside Delhi or for those relocating.
3. **Holistic Patient Care:** Mental health often intersects with physical health. Having access to mental health professionals empowers general physicians to offer holistic care by addressing the psychological components of chronic diseases like diabetes, hypertension, and chronic pain.
4. **Bridge Information Gaps:** Physicians who may lack specialized training in mental health can use this tool to connect with professionals who can provide collaborative support for patients with complex needs.
5. **Enhanced Trust:** By providing timely and appropriate mental healthcare referrals, general physicians can build greater trust with patients, ensuring continuity of care and better health outcomes.

More Info

Information that may be useful to mental health professionals, persons with mental health conditions, and their caregivers can be found in the **MORE INFO** section of this website.

https://raah.nimhans.ac.in/

XVII. Various academic activities by EDPA and its members in Quarter of Jan - March 2025

- **EDPA members chairing CME by API Delhi State Chapter, All Zones- East, North, South, West**

Dr Swathi Jami. Dr Vijay Arora, Dr RPS Makkar, Dr Pankaj Chaudhary, Dr Paras Gangwal
COSM-Confluence of Specialities in Medicine: 11th Jan 2025, Park Inn Hitel, PPG. Topics were very relevant, and speakers included well known experts in their respective fields :

- Neuromodulation in Headache – speaker- Dr Debashish Chaudhary
- Heart Failure- Dr Subhash Chandra
- Rheumatoid arthritis- Dr Rohini Handa
- MASLD/MASH- Dr Rajesh Upadhyay

- Congratulations to **Dr NP Singh**, Nephrologist and senior EDPA member on the release of "Monograph on Exploring Hypertension- case based approach" as its Chief Editor at the APICON 2025, in Kolkata

- **Dr. NP Singh** : Talks delivered on ‘Hypertension In Elderly’; and ‘Dyselectrolemia in ICU’ at APICON 2025

- Talk delivered by Dr SK Gupta , Senior EDPA member on Prediabetes at APICON 2025

- **Dr Pankaj Chaudhary ,** EDPA President delivering a talk at APICON 2025

- **Dr Pankaj Chaudhary** chairing a session at APICON 2025at Kolkata on Vasculitis session by Dr Col Verghese, HOD, AFMC, Pune

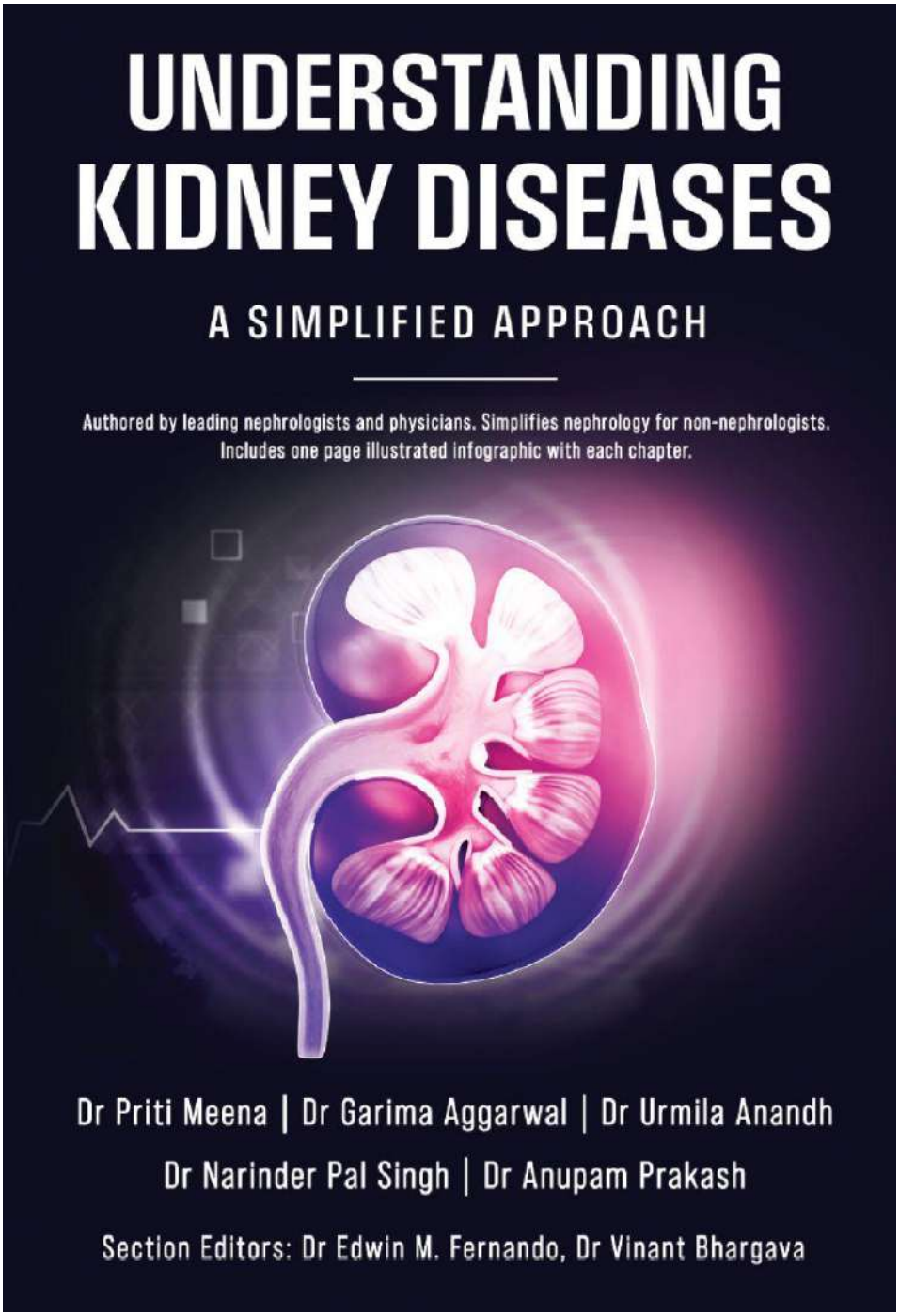
- **Dr Nitin Sinha, senior EDPA member chairing a session at APICON 2025 at Kolkata**

- **Dr Vijay Arora,** delivering his talk on in Renal protection by Empagliflozin at APICON 2025 at Kolkata

- **Dr Garima Agarwal ,** EDPA member delivering her talk on AKI at APICON 2025 at Kolkata

Dr Ruby Bansal giving a talk on HIV and pregnancy in the ID meeting in Mumbai Taj lands End, 21-23rd March 2025

Dr Anivita Agarwal giving a talk on Safe Conception in HIV couple in the ID meeting in Mumbai Taj Lands End, 21-23rd March 2025



- **Congratulations to Dr NP Singh, Dr Garima , Dr Anupam Prakash ,** Senior EDPA members for the launch of their book Kidney Diseases- A simplified approach, at the Grand Inauguration Ceremony of APICON 2025 in Kolkata

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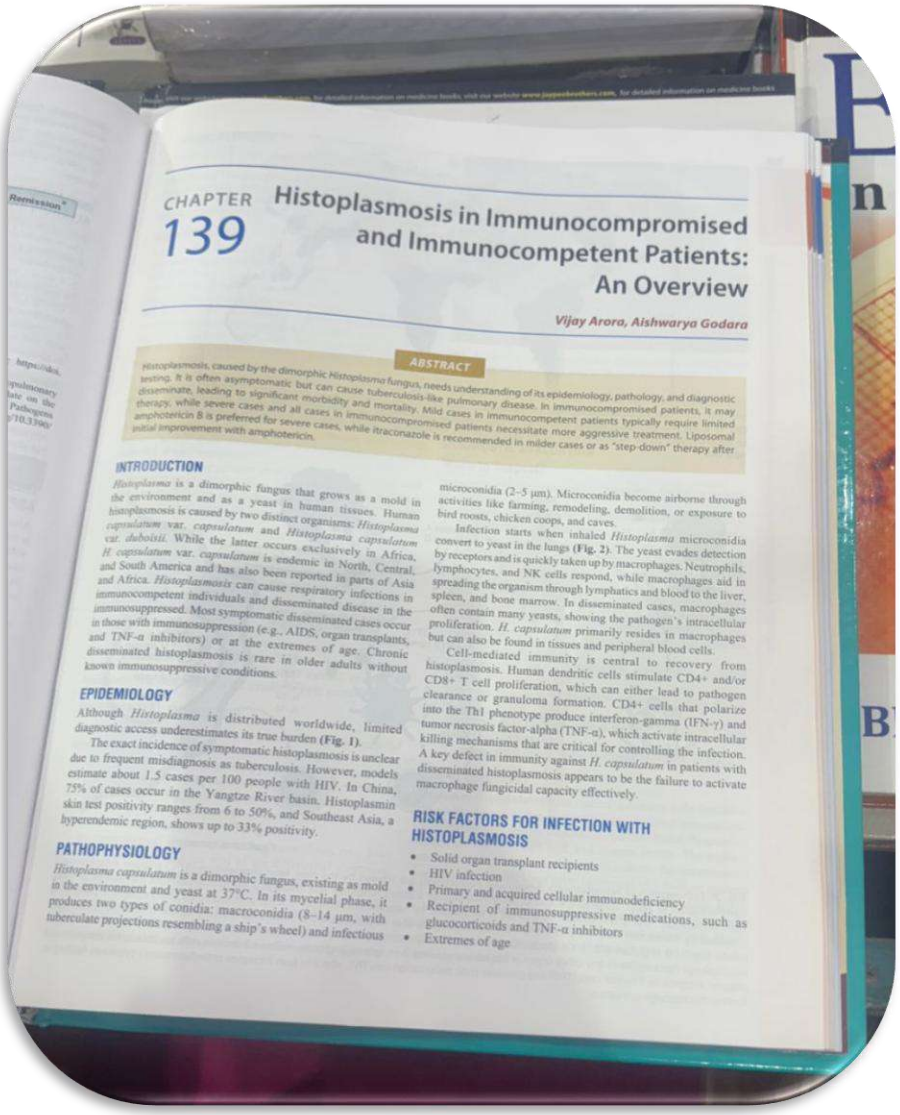


CHAPTER 139

Histoplasmosis in Immunocompromised and Immunocompetent Patients: An Overview

Vijay Arora, Aishwarya Godara

ABSTRACT

Histoplasmosis, caused by the dimorphic *Histoplasma* fungus, needs understanding of its epidemiology, pathology, and diagnostic testing. It is often asymptomatic but can cause tuberculosis-like pulmonary disease. In immunocompromised patients, it may disseminate, leading to significant morbidity and mortality. Mild cases in immunocompetent patients typically require limited therapy, while severe cases and all cases in immunocompromised patients necessitate more aggressive treatment. Liposomal amphotericin B is preferred for severe cases, while itraconazole is recommended in milder cases or as "step-down" therapy after initial improvement with amphotericin.

INTRODUCTION

Histoplasma is a dimorphic fungus that grows as a mold in the environment and as a yeast in human tissues. Human histoplasmosis is caused by two distinct organisms: *Histoplasma capsulatum* var. *capsulatum* and *Histoplasma capsulatum* var. *duboisii*. While the latter occurs exclusively in Africa, *H. capsulatum* var. *capsulatum* is endemic in North, Central, and South America and has also been reported in parts of Asia and Africa. *Histoplasmosis* can cause respiratory infections in immunocompetent individuals and disseminated disease in the immunosuppressed. Most symptomatic disseminated cases occur in those with immunosuppression (e.g., AIDS, organ transplants, and TNF-α inhibitors) or at the extremes of age. Chronic disseminated histoplasmosis is rare in older adults without known immunosuppressive conditions.

EPIDEMIOLOGY

Although *Histoplasma* is distributed worldwide, limited diagnostic access underestimates its true burden (**Fig. 1**).

The exact incidence of symptomatic histoplasmosis is unclear due to frequent misdiagnosis as tuberculosis. However, models estimate about 1.5 cases per 100 people with HIV. In China, 75% of cases occur in the Yangtze River basin. Histoplasmin skin test positivity ranges from 6 to 50%, and Southeast Asia, a hyperendemic region, shows up to 33% positivity.

PATHOPHYSIOLOGY

Histoplasma capsulatum is a dimorphic fungus, existing as mold in the environment and yeast at 37°C. In its mycelial phase, it produces two types of conidia: macroconidia (8–14 μm, with tuberculate projections resembling a ship's wheel) and infectious microconidia (2–5 μm). Microconidia become airborne through activities like farming, remodeling, demolition, or exposure to bird roosts, chicken coops, and caves.

Infection starts when inhaled *Histoplasma* microconidia convert to yeast in the lungs (**Fig. 2**). The yeast evades detection by receptors and is quickly taken up by macrophages. Neutrophils, lymphocytes, and NK cells respond, while macrophages aid in spreading the organism through lymphatics and blood to the liver, spleen, and bone marrow. In disseminated cases, macrophages often contain many yeasts, showing the pathogen's intracellular proliferation. *H. capsulatum* primarily resides in macrophages but can also be found in tissues and peripheral blood cells.

Cell-mediated immunity is central to recovery from histoplasmosis. Human dendritic cells stimulate CD4+ and/or CD8+ T cell proliferation, which can either lead to pathogen clearance or granuloma formation. CD4+ cells that polarize into the Th1 phenotype produce interferon-gamma (IFN-γ) and tumor necrosis factor-alpha (TNF-α), which activate intracellular killing mechanisms that are critical for controlling the infection. A key defect in immunity against *H. capsulatum* in patients with disseminated histoplasmosis appears to be the failure to activate macrophage fungicidal capacity effectively.

RISK FACTORS FOR INFECTION WITH HISTOPLASMOSIS

- Solid organ transplant recipients
- HIV infection
- Primary and acquired cellular immunodeficiency
- Recipient of immunosuppressive medications, such as glucocorticoids and TNF-α inhibitors
- Extremes of age

- **Congratulations to Dr Vijay Arora, Dr Aishwarya Godara ,** EDPA members for contribution a book chapter on "Histoplasmosis in Immunocompromised and Immunocompetent patients"

🌹👏👏

CME Meeting on Transforming T2DM treatment approached with Dr BM Makkar and EDPA on 29th January, 2025 at Hotel Crown Plaza, Mayur Vihar Delhi

Dr Pankaj Chaudhary, President EDPA, chairing a Cardiology Session in the CardioCon conference held at Kaushambi, Radisson in Ghaziabad

- Dr Paras, Dr AK Pandey, Dr Pankaj Chilling after the successful CardioCon conference organised by Dr AK Pandey

- **Dr Pawan Sharma** , Senior Cardiologist at Max PPG, successfully performed CHIP TAVR intervention in a complex patient.

🌹👏👏

- The Next generation, making EDPA Proud; **Dr Aditi Arora** , daughter of Dr Vijay Arora, has just completed her MD in Internal Medicine. Heartiest Congratulations to Dr Aditi and Dr Vijay.!! 🌹👏👏

CME on Obesity with Eli Lilly and EDPA on Launch of Mounjaro:
Faculty: Dr Ted Wu (Australia), Dr Sanjay Kalra, Dr S, Wangnoo, 26th March 2025, Hotel Leela, CBD

XVIII. Medical Pics contributed by EDPA Members

1. Occlusion MI patterns

Contributed by Dr Ajay Mitta, Senior Interventional Cardiologist and EDPA member

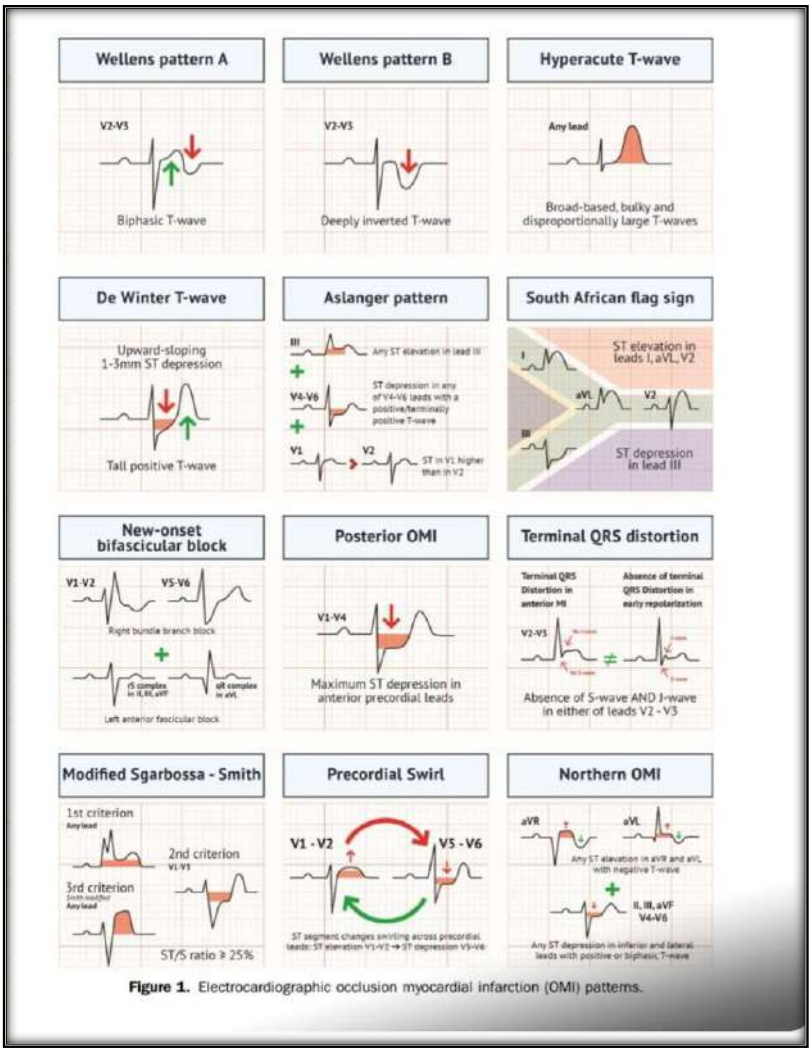
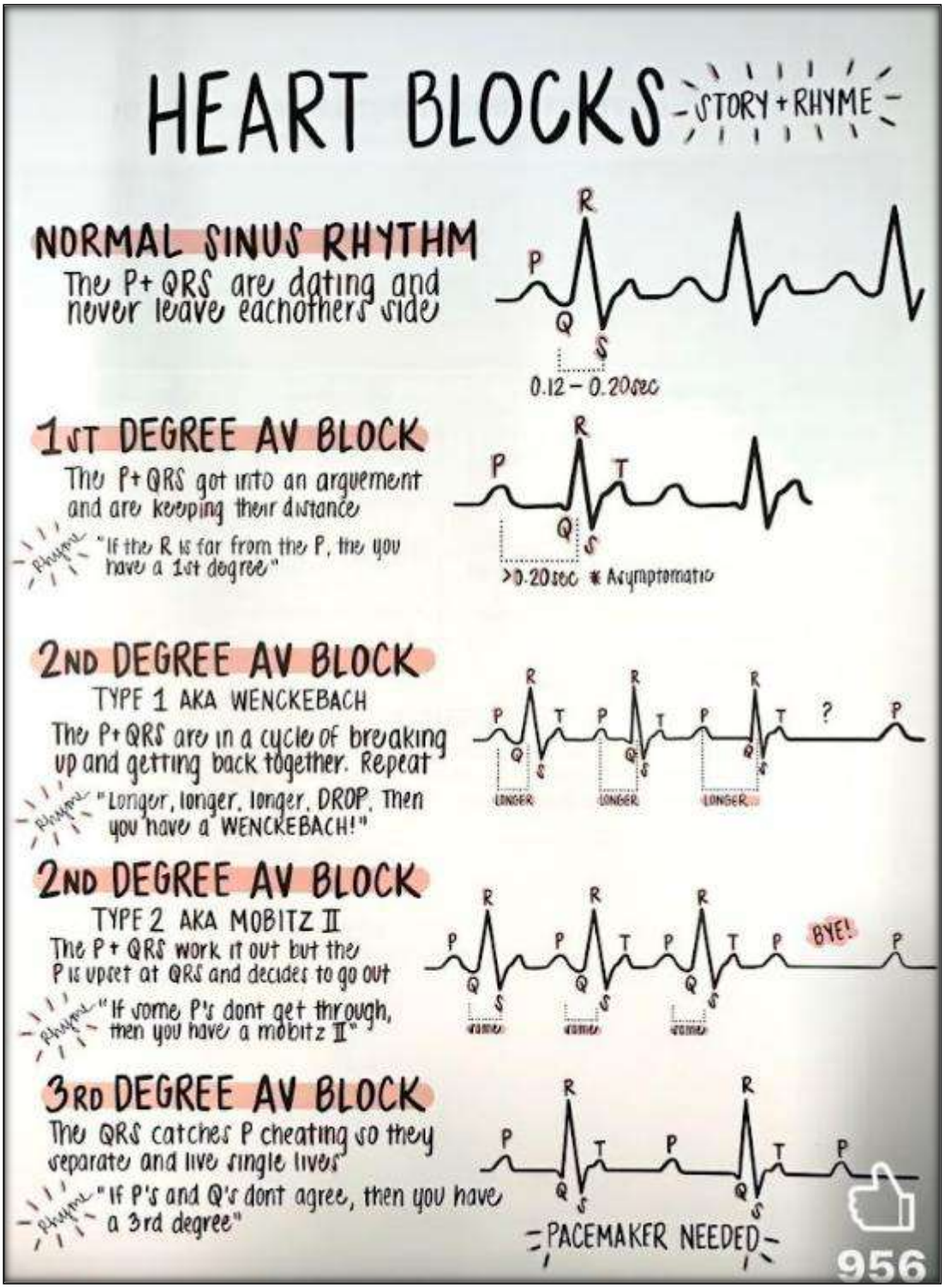


Figure 1. Electrocardiographic occlusion myocardial infarction (OMI) patterns.

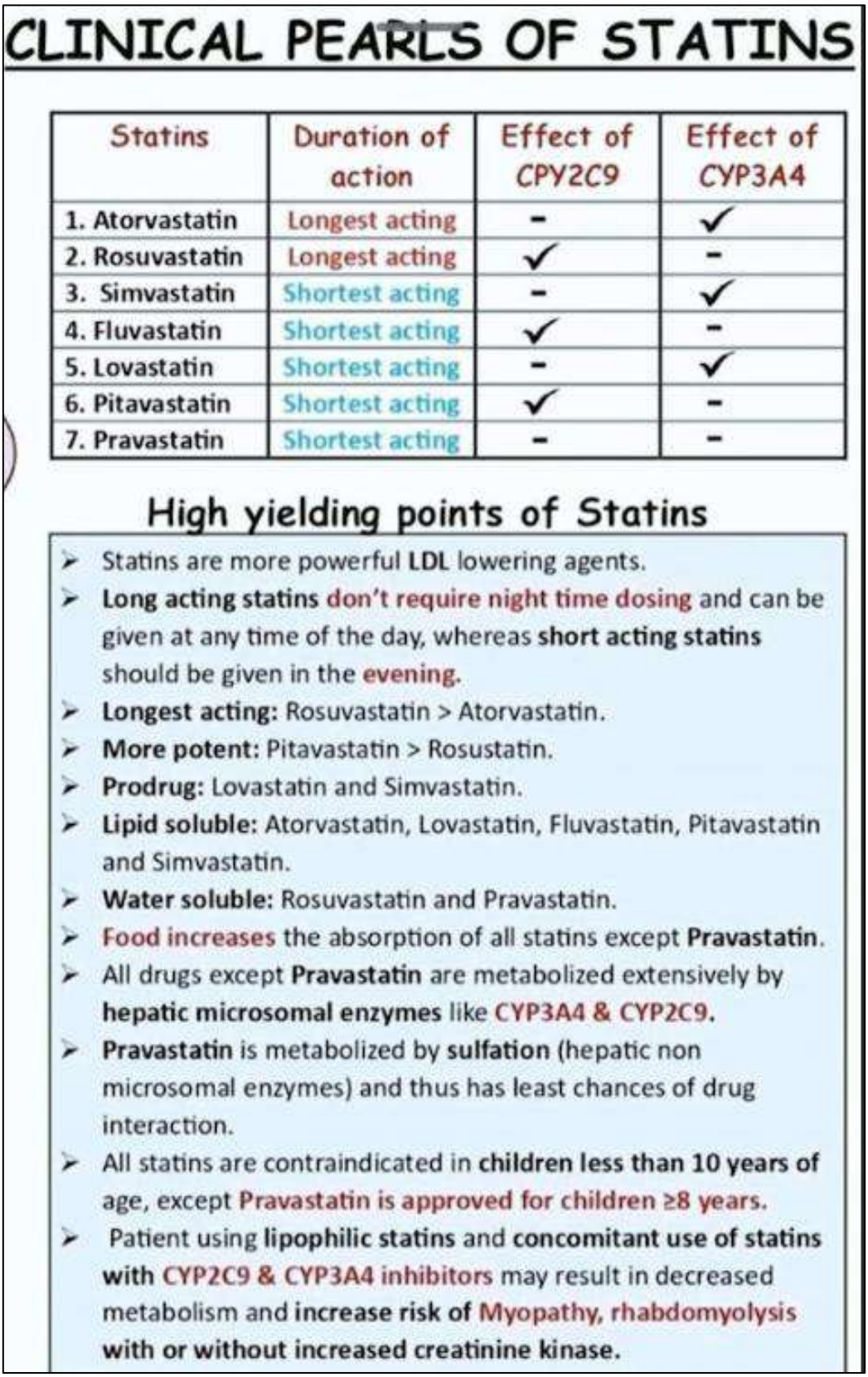
2. Heart Blocks

Contributed by Dr Ajay Mitta, Senior Interventional Cardiologist and EDPA member



3. Statin Pearls

Contributed by Dr Deepesh Sood, EDPA Member



CLINICAL PEARLS OF STATINS

Statins	Duration of action	Effect of CPY2C9	Effect of CYP3A4
1. Atorvastatin	Longest acting	-	✓
2. Rosuvastatin	Longest acting	✓	-
3. Simvastatin	Shortest acting	-	✓
4. Fluvastatin	Shortest acting	✓	-
5. Lovastatin	Shortest acting	-	✓
6. Pitavastatin	Shortest acting	✓	-
7. Pravastatin	Shortest acting	-	-

High yielding points of Statins

- Statins are more powerful **LDL** lowering agents.
- **Long acting statins** don't require night time dosing and can be given at any time of the day, whereas **short acting statins** should be given in the evening.
- **Longest acting:** Rosuvastatin > Atorvastatin.
- **More potent:** Pitavastatin > Rosustatin.
- **Prodrug:** Lovastatin and Simvastatin.
- **Lipid soluble:** Atorvastatin, Lovastatin, Fluvastatin, Pitavastatin and Simvastatin.
- **Water soluble:** Rosuvastatin and Pravastatin.
- Food increases the absorption of all statins except **Pravastatin**.
- All drugs except **Pravastatin** are metabolized extensively by **hepatic microsomal enzymes** like CYP3A4 & CYP2C9.
- **Pravastatin** is metabolized by **sulfation** (hepatic non microsomal enzymes) and thus has least chances of drug interaction.
- All statins are contraindicated in **children less than 10 years of** age, except Pravastatin is approved for children ≥8 years.
- Patient using **lipophilic statins** and **concomitant use of statins with** CYP2C9 & CYP3A4 inhibitors may result in decreased metabolism and **increase risk of** Myopathy, rhabdomyolysis **with or without increased creatinine kinase.**

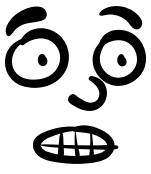
4. Obesity : New definition made easy

Contributed by Dr Anupam Singh, EDPA Member

Aspect	NICE Guidelines	Indian Consensus (Anoop Misra et al.)	Reason/Evidence
Definition of Obesity	Overweight: BMI 25–29.9 kg/m²; Obesity: BMI ≥30 kg/m²; Waist circumference: Men >94 cm, Women >80 cm	Overweight: BMI 23–24.9 kg/m²; Obesity: BMI ≥25 kg/m²; Waist circumference: Men ≥90 cm, Women ≥80 cm	Asian Indians have higher body fat percentage at a lower BMI. Increased metabolic risks (e.g., diabetes) are observed at lower BMI thresholds.
Abdominal Obesity	Waist-to-hip ratio and waist circumference used, not prioritized for central adiposity evaluation	Emphasizes waist-to-height ratio (W-HtR) >0.5	Central obesity is prevalent in Indians and strongly associated with insulin resistance and cardiovascular diseases. Waist circumference correlates better with risks.
Behavioral and Lifestyle Interventions	General calorie reduction and 150–300 minutes/week physical activity recommended	Culturally adapted diet plans (reducing carbohydrate-heavy meals); 45–60 minutes daily physical activity for overweight, 60+ minutes for obesity	Indian diets are carbohydrate-heavy, requiring shifts to protein- and fiber-rich diets.
Pharmacotherapy	Orlistat for BMI ≥28 kg/m²	Pharmacotherapy starts at BMI ≥27.5 kg/m² or earlier in high-risk individuals. Uses Orlistat and GLP-1 receptor agonists for T2D or metabolic syndrome	Indians have higher comorbidity risks at lower BMI levels. Liraglutide shows significant weight loss and reduction in diabetes progression in Indian studies.
Surgical Interventions	Bariatric surgery for BMI ≥40 kg/m² or ≥35 kg/m² with comorbidities	Surgery at BMI ≥35 kg/m² (without comorbidities), BMI ≥30 kg/m² (with comorbidities), BMI ≥27.5 kg/m² (severe cases)	Earlier onset of obesity-related complications in Indians necessitates early intervention.
Comorbidity Risks	Focuses on global risks like hypertension, diabetes, and cardiovascular diseases	Highlights unique Indian comorbidities: NAFLD, PCOS, high prevalence of insulin resistance	NAFLD prevalence is 30–50% in urban India. Insulin resistance is 3–4 times higher in Asian Indians.
Cultural and Economic Considerations	Universal guidelines for resource-rich settings	Tailored to Indian socio-economic conditions; suggests low-cost interventions like dietary changes and physical activity	Limited access to tools (e.g., DEXA scans) and medications in India. High obesity prevalence due to lifestyle changes post-COVID-19.

XIX. FUN CORNER!! 😊 😊

1. Hernia Tea



##$$???  !!!

2. CME Speakers to be cautioned!!!

Speaker pushed off stage by moderator, hospitalized.

- Dr. Mohit Garg
www.quackdoses.com

Mumbai: In a never before seen incident in the history of medical CMEs, the moderator of a CME pushed the speaker off the dais, surprisingly drawing cheer and celebration among the audience. It has now emerged that the moderator was upset that the speaker (identity withheld) did not stop presenting his PPT even after the warning bells.

It is a well known fact that many doctor speakers tend to keep ignoring the time frames, ignoring the signals, and keep talking well past the "safe-zone" (added extra time) of their presentation time, making the event organizers uncomfortable.

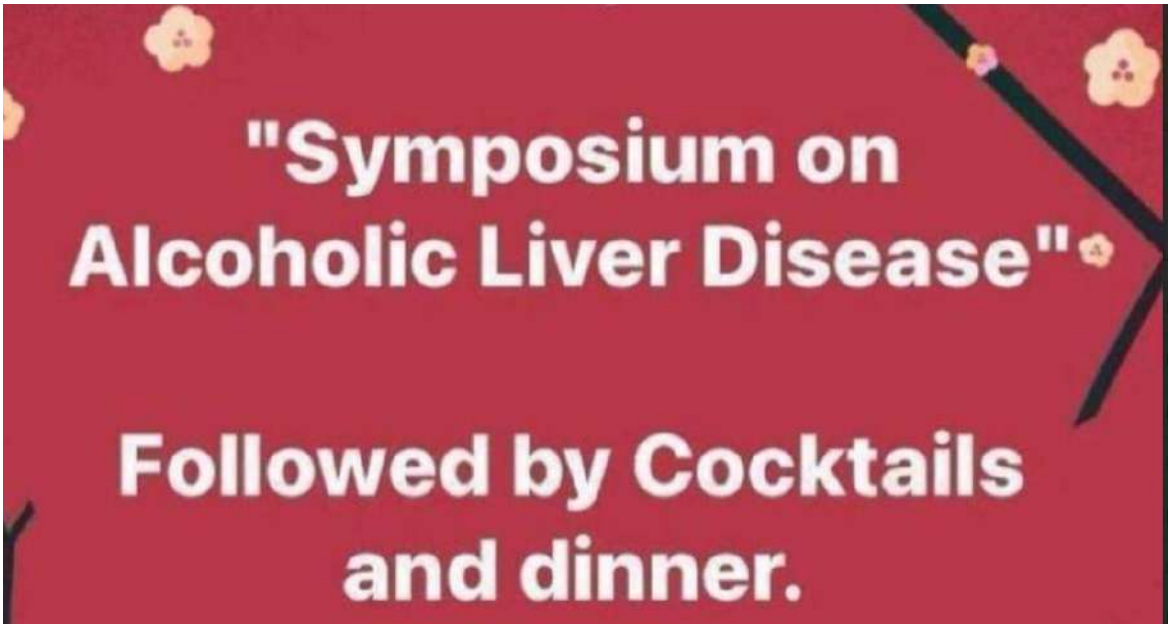
In an exclusive interview with the Quackdoses, the brave moderator Dr. Pushkar Dey said, "Already the

audience looked bored and disengaged listening to him read paragraphs of texts – word to word from his slides. Even after my multiple warning bells, he kept on saying "last few slides, since we're out of time, I will just take 2 minutes more, etc". Most speakers take the hint and stop talking when a moderator visibly stands up and moves towards the stage. In spite of me directly going up and standing next to him, it did not deter him from talking. Amid growing audience impatience, I then had no option but to push him off the stage. A speaker who trespasses on the time of following speakers is far more impolite than I was. On the bright side, though sarcastically, but I did thank him on mic after the push, and also informed the audience that perhaps our speaker would be willing to answer additional questions offline during our break. But he was not".

Unconfirmed sources have claimed that the speaker had to subsequently be admitted to a local hospital for his injuries, which were sustained not due to the fall, but after forgetting his wife's birthday which happened to be on the same day.

Contributed By Dr Amrit Pal Singh, Consultant Physicians, Max PPG!! 😊

Contributed By Dr Vijay Arora, Yashodha Medicity, Director and Senior Consultant , Kailash Deepak Hospital!!



Contributed BY Dr Ajay Mittal Senior Cardiologist , Kailash Deepak Hospital!! 😊

3. EDPA Celebrates Valentine's day!!

EDPA celebrating Valentine's day after the Monthly CME on 14th Feb 2025

4. Walking The Talk!! Or ..."Cycling" the talk!! Dr Sk Gupta 😊 !!

Dr SK Gupta, Senior EDPA member ...promoting exercise to prevent Diabetes!!!

5. Best pictures of the EDPACON 2024! 😊


EAST DELHI PHYSICIANS' ASSOCIATION (EDPA)


EAST DELHI PHYSICIANS' ASSO


EAST DELHI PHYSICIANS' ASSOCIATION (EDPA)
ANNUAL CONFERENCE
Sunday, December 22, 2024
EDPACON 2024

Relaxing after the hard day's work at EDPA

XX. EDPA announcement

East Delhi Physicians' Association

EDPA MIDCON 2025

"Advancing Healthcare Together"

Event Details:

Date & Venue: Sunday, 27th July 2025*

Radisson Blu, Kaushambi *

Organizing Chairman: Dr. Ajay Kumar Gupta

Organizing Secretary: Dr. Himanshu Sharma

*(TBC)

Stay Tuned, and Block your day!!!

Silver Jubilee – YEAR 2024–25

EDPA Quarterly Medical Bulletin

25TH ANNIVERSARY OF EDPA

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