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# The Anaesthesia Pulse

The Official Newsletter of ISA Noida GB Nagar



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## Dr Peeyush Chaudhary

It gives me great pleasure seeing the quarterly newsletter of ISA GBN being published regularly keeping all the fraternity members abreast with the dynamic progress of the society. This quarter has seen the members actively participate in various academic activities and bringing laurels to society. COLS is being promoted actively by the members at various levels. Monthly Academic Meeting are being held at regular intervals and from now onwards we have decided to do away with the online/hybrid mode to encourage more personal attendance and face-to-face interaction among members.

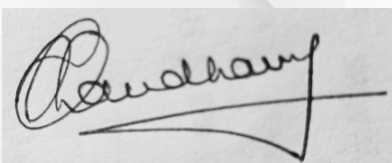
I am proud to announce that our branch has once again been awarded a National Sponsored CME that is going to be held in the month of February 2025. This will be integrated with a cricket/ sports tournament the details of which are being worked out. The Foundation Day is around the corner in July we again plan to celebrate it with an annual CME like last year The program is being finalized and will be shared with you all shortly.

Once again, I request all my fellow anaesthesiologists to come together under the banner of ISA by becoming active members and taking part in the various activities that are being promoted at the National, State, and City branch level.

**Together we can**

**Jai Hind**

**Jai ISA**



**Dr Peeyush Chaudhary**



## Dr Kapil Singhal

As founder president of ISA Noida GB Nagar, it's always a pleasure to see the branch growing in every possible direction. Throughout its rich presence, ISA Noida GB Nagar has established an outstanding regional and national reputation for excellence in the professional, social, and cultural arena. This is due to our extraordinary leadership, committed team of office bearers, executives, and amazing members.

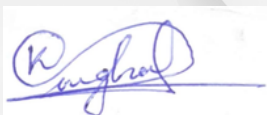
I understand it's not an easy task for any small branch like ours to bring out consecutively for 3rd Newsletter in a row. Our editorial team has understandably struggled a lot with the current issue but they have finally managed to maintain the continuity. I hope they should not get discouraged by ups and downs; as a flat line indicates the non-existence of life.

The next couple of months going to be very interesting, as our journey will enter an exciting stage of a spurt of activities viz. Launch of Save Environment campaign, Hospital Infection Prevention Week, Annual CME, etc. I urge all not only to register themselves but also encourage others, for our upcoming activities. Looking forward to seeing you all there in a few weeks virtually and in person as and when required.

Together we have to strengthen, hence I'll again request members to come up with articles for your own newsletter. Your contribution is vital for its sustainability. All the executive members and I are looking forward to your participation in raising the quality and visibility of not only our newsletter but also our city branch at the National level.

**My best wishes to everyone**

**Jai Hind! Jai ISA**



**Dr. Kapil Singhal**



**Dr Mukul K. Jain**

Dear friends,

I am delighted to announce the new issue release of our branch journal, a testament to our collective dedication to fostering knowledge and collaboration within our esteemed community. Since the inception of the branch, it has been developing and spreading in all ways due to the support of all members. As the honorable secretary, I extend my heartfelt gratitude to all contributors and editors for their invaluable efforts in making this publication a reality.

May this journal serve as a beacon of innovation and excellence, showcasing the remarkable achievements of our members and advancing our field to new heights.



**Dr. Mukul Jain**





## Dr Poonam Motiani Editor's note

**Dear Readers,**

As we embark upon the journey of our third issue of 'The Anaesthesia Pulse', it brings me immense pleasure to welcome you once again to the pages of our anaesthesia newsletter. In the realm of healthcare, staying abreast of advancements and best practices is not just a task but a necessity, and it is with this conviction that we present to you another edition filled with insightful articles and updates from the field.

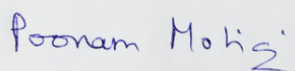
As editors, our mission remains to serve as a platform for knowledge exchange, fostering collaboration and innovation within our anaesthesia community. In this issue, our esteemed contributors have shared their expertise, offering valuable insights in the management of massive blood transfusion to the latest techniques in regional anaesthesia. We extend my heartfelt gratitude to our contributors for their dedication and commitment, who form the cornerstone of this publication.

This quarter has also seen our members participating in various academic and literary activities and we are pleased to share their achievements.

To our readers, I extend my sincerest appreciation for your continued support and engagement. Together, let us continue to explore, learn, and grow as we navigate the ever-evolving landscape of anaesthesia.

Wishing you an interesting and informative reading experience!

Warm Regards,



**Dr Poonam Motiani,**

## January 2024

The monthly clinical meet of ISA GB Nagar was hosted by Yatharth Superspeciality Hospital, Greater Noida in hybrid mode on 19th January 2024.

The talks included " recent advances in PDPH " by Dr Maninder Kaur, Consultant Anaesthesia and " pain management strategies in renal transplant recipients " by Dr Rajendra Bansal , Consultant Anaesthesia. The session was moderated by Dr Shipra Singh, Principal Consultant Anaesthesia and chaired by Dr Anshuman Mishra, HOD Anaesthesia.

PDPH is caused due to low CSF pressure occurring within 5 days of dural puncture. Younger age and female sex are risk factors. Use of narrower gauge and non-cutting needles is advisable. Keeping the bevel parallel to long axis of spine may reduce the risk.

First line treatment is conservative. Multi-modal analgesia including acetaminophen, NSAIDs should be used. Caffeine may provide temporary relief. Combination of neostigmine and atropine have been used. Sphenopalatine block, Greater Occipital nerve block or combination of both (NAG) has been used successfully by many. EBP Epidural blood patch is the gold standard , usually given after 48 hours.

Consensus practice guidelines have been published by JAMA network in 2023 to provide an evidence based picture and prepare an evidence based and systematic peri-operative management plan for PDPH patients.

## February 2024

A CME was conducted by the Department of Paediatric Anaesthesia, Postgraduate Institute of Child Health (PGICH), Sector - 30, Noida, under the aegis of ISA (Indian Society of Anaesthesiologists) Noida GB Nagar branch, on 13th March 2024 (unconcluded February 2024 activity), in a Hybrid Mode.

Prof (Dr.) Arun K Jain, Director, PGICH was the Chief Patron, Dr Mukul K Jain, Professor and Head of Department, the Organising Chairman and Dr Poonam Motiani, Professor, the Organising Secretary of the event. The programme was held in a hybrid mode and was attended in person by Prof (Dr.) Arun K Jain, Director, PGICH, Dr Peeyush Chaudhary, Officiating President ISA Noida GBN, Dr Kapil Singhal, Founder President ISA Noida GBN, Dr Samir Bolia, Dr Chandan, both senior consultant anaesthesiologists, faculty and residents from the Department of Paediatric Anaesthesia and from other departments at PGICH in addition to many senior anaesthesiologists and stalwarts who joined online. The programme commenced with a welcome address by Dr (Prof.) Mukul K Jain and felicitation of the office bearers of ISA Noida GBN. Academic presentations included a case presentation on "Perioperative concerns in a neonate with G6PD deficiency undergoing laparotomy" by Dr Shambhavi Sharma, an IAPA fellow, followed by a talk on "Paediatric massive blood transfusion" by Dr Sunaakshi Puri, an Assistant Professor, in the department. The last talk was delivered by Dr (Prof.) Poonam Motiani on "Anaesthesia and neurotoxicity to the developing brain: Myth or Reality".

In the active discussion which followed, about 25 anaesthesiologists, including faculty and consultants from various reputed hospitals in Noida and Delhi participated; various aspects of the three presentations including perioperative anaesthesia and surgical concerns, patient and OT preparation were discussed. The programme culminated successfully with felicitation of the speakers, a vote of thanks by Dr Poonam Motiani, followed by refreshments.



## March 2024

The clinical meet for the month of March was organised by Government Institute of Medical Sciences, Greater Noida which was an online session. The topic was peri-operative fluid therapy in paediatric patients. It was presented by Dr Sushma Therissa Athota, Junior Resident from Department of Anaesthesiology & Intensive Care, GIMS.

Appropriate fluid management is vital for adequate tissue perfusion and balancing the internal milieu especially in perioperative settings and critically ill children. Paediatric population is heterogeneous so one formula may not suffice and hence both the quantitative and qualitative perspective of fluid management should be based on physiology and pathology of the child along with their perioperative needs. In perioperative setup, the fluid is administered to meet fluid deficits (fasting and other daily based losses), blood losses and third space losses. Most of the anaesthetists still follow the paediatric maintenance fluid calculations based on Holiday and Segar formula which is based on studies conducted on healthy children more than 70 years ago. Recently, there has been a lot of debate about this concept, especially as there are serious concerns regarding the development of complications like hyponatremia and hyperglycemia, both of which can result in neurological damage or even mortality in a sick child.

This seminar was an attempt to provide a historical perspective as well as current evidence-based approach to peri-operative paediatric fluid management. The session was chaired by Dr Nazia Nazir, Professor and Head, Department of Anaesthesia, GIMS and attended by almost 25 members.

## Paediatric Massive Blood Transfusion

Dr Sunaakshi Puri, Assistant Professor, Paediatric Anaesthesia, PGICH, Noida

Massive blood transfusion (MBT) refers to the administration of blood products in significant volumes over a short period of time. Care provided to children experiencing massive haemorrhage needs to be standardized. However, a well-established definition and management guidelines are lacking. The more recent, compelling and practically relevant definition of pediatric MBT, by Tama et al, is blood product transfusion  $> 40$  ml/kg in the first 4 hours of presentation.<sup>1</sup>

### PATHOPHYSIOLOGY OF MBT

Coagulopathy is the most important morbidity complicating major blood loss and MBT. Tissue injury secondary to trauma or surgery results in release of tissue factor with subsequent activation and consumption of coagulation factors. Also increased expression of thrombomodulin secondary to hypoperfusion contributes to thrombin generation and fibrinolysis; Various other mechanisms include haemodilution, hypothermia, hypocalcaemia and acidosis.

### MANAGEMENT OF MASSIVE BLOOD TRANSFUSION

#### Identification of massive hemorrhage

Clinical features include altered mental status, dyspnea, tachycardia, hypotension, increased capillary refill and oliguria. However, these may be affected by anaesthesia. A narrow pulse pressure is an early and sensitive indicator. Blood gas analysis can identify lactic acidosis, and hemoglobin. Blood lost during surgery is collected into suction bottles, swabs and directly lost in the surgical field, making blood loss assessment difficult and inaccurate. A more accurate means of estimation can be the amount of blood products required to maintain normal vital signs.

#### MANAGEMENT OF MBT

Massive Transfusion Protocol (MTP) should be activated in case of massive haemorrhage with signs of hypovolaemic shock or with no likelihood of control, or when anticipated or actual blood loss is  $40$  ml/kg. An MTP should address the age specific triggers for initiating & terminating massive transfusion, blood product availability, delivery in pre-defined ratios, use of adjuncts and performance audits.

The systematic review on massive transfusion in pediatric population assessed outcomes after implementation of MTP<sup>2</sup> and found that contrary to adult population, did not significantly reduce mortality or major morbidity. Lack of adherence to protocol guidelines and limited data may explain the same.

The basic management principles remain securing the airway, ensuring adequate breathing, maintaining circulation, securing adequate iv access, sending blood samples to test for complete blood count, blood grouping and cross matching, serum electrolytes, renal function test and coagulogram, arresting external haemorrhage and damage control resuscitation. Children have age specific blood volume and hemoglobin targets. Therefore, the maximum allowable blood loss should be calculated.

## **BLOOD VOLUME REPLACEMENT STRATEGIES**

**Damage control or hemostatic resuscitation :** Administration of crystalloids, blood and blood products should minimize iatrogenic resuscitation injury, prevent worsening of shock and coagulopathy. It is based upon limiting crystalloid fluid resuscitation and transfusing blood products empirically before coagulopathy is identified by testing. Maw et al concluded that there is little evidence for improved outcomes using component-based transfusion in a rigid 1:1:1 strategy in children.<sup>3</sup> Noland et al found that administering PRBC and fresh frozen plasma (FFP) in a 1:1 ratio was associated with the highest survival. Authors reported increased mortality by OR 3.08 (1.1-8.57) per unit increase over 1:1 ratio.<sup>4</sup> On the contrary, Cunningham et al, did not observe improved survival for those who received high (>1:1) plasma : RBC ratio.<sup>5</sup> Therefore, current best evidence is to support use of 1:1 for PRBC:FFP.

## **Role of tranexamic acid (TXA) in paediatric massive transfusion**

TXA inhibits fibrinolysis by binding to both plasminogen and plasmin, thereby reducing breakdown of fibrin. The CRASH 2 trial in adult poly-trauma patients demonstrated a reduction in mortality and bleeding, if given early in the resuscitation process (<3 h from injury to treatment).

However, TXA use has not been associated with increased survival in paediatric trauma.<sup>6</sup> No differences in the odds of thromboembolic events was observed. Based upon adult literature, in view of limited literature in children, it is suggested to administer 10-20 mg/kg (maximum 1 gram) TXA over 10 minutes, followed by 2 mg/kg/hour infusion (max 125 mg/hr).

## ROLE OF CRYOPRECIPITATE

Cryoprecipitate, is a frozen blood product consisting of Fibrinogen, Factor 8, 13, vWF and fibronectin. A large retrospective multicenter cohort study of 2387 trauma pediatric patients demonstrated a lower 24-hour and 7-day mortality in those who received cryoprecipitate within 4 hours of injury.<sup>2</sup> Similarly, a multicenter prospective observational study of 449 children with life threatening hemorrhage, by Horst et al showed lower 24 hour mortality in patients who received cryoprecipitate.

## ASSESSMENT OF COAGULOPATHY

Early identification, prevention and management of coagulopathy remains vital. Apart from the conventional tests of coagulation, the Point of Care (POC) tests include viscoelastic tests of hemostasis, including thromboelastography (TEG) & rotational thromboelastometry (ROTEM). Though, in adults, reductions in mortality and clinically relevant bleeding using TEG and ROTEM has been reported in 2 RCTs, robust data is lacking in the paediatric cohort.

## CONCLUSION

The most practical accepted definition of MBT is blood product transfusion > 40 ml/kg in 4 hrs. Early identification & activation of MTP remains essential. Individualized MTP protocol must be implemented for each center. In view of lack of sufficient prospective data, currently the ratio of 1:1 (PRBC:FFP) is recommended. Transfusion should/may be guided by using POC tests.

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# ANAESTHESIA AND NEUROTOXICITY IN THE DEVELOPING BRAIN: MYTH or REALITY?

– Dr Poonam Motiani, Professor (Dept. of Paediatric Anaesthesiology),  
Post Graduate Institute of Child Health, Noida

## INTRODUCTION

Children constitute 40% of the population in India; In the U.S, over 1.3 million children < 5 years undergo surgeries every year, in addition to many who receive sedatives or GA for neuroimaging studies and procedural sedation. For patients, parents, and clinicians, the possibility of anaesthetic and sedative drugs being neurotoxic to the developing brain is of utmost importance.

## THE ISSUE

Animal studies have shown neuronal damage to the developing brain following exposure to anaesthetic and sedative drugs, resulting in behavioural and cognitive deficits. However, the causative, anaesthetic and patient factors, in human studies, remains unclear [1].

## PROPOSED MECHANISMS

1. **Oxidative stress associated apoptosis:** Anaesthetics may induce reactive oxygen species (ROS) formation within mitochondria triggering Cytochrome C release into the cytosol, leading to apoptotic neuronal cell death.
2. **Other mechanisms** may include impaired neural development due to abnormal NMDA or GABA receptor expression; dysregulation of developmental processes, such as synaptogenesis, neurogenesis, and dendritic branching.

## NEUROTOXICOLOGIC EFFECTS IN ANIMAL STUDIES

A seminal article, in 1999, described increased neuroapoptosis following exposure to ketamine in neonatal rats. Subsequently, [2] long-term neurobehavioral deficits were also found in neonatal rats exposed to clinical concentrations of nitrous oxide, isoflurane, and midazolam, initiating intense interest. However, there are limitations of translation of animal studies to humans because of:

1. Interspecies differences in brain development.
2. Dose and duration of anaesthesia in animal studies often exceeds clinically relevant equivalents.
3. No surgical exposure in animal models.
4. Inability to prove anaesthesia-induced neuronal cell death/ histopathological findings in humans.

## LACK OF DEFINITIVE EVIDENCE IN HUMAN STUDIES

While animal studies have found neurotoxic effects due to anaesthetic medications, human studies have produced mixed results. The best evidence suggests no association with intelligence and unclear association with neurodevelopmental outcomes.

Limitation in literature is due to availability of only one published Randomized Clinical Trial, the rest being Observational studies.

- 1. Prospective, Randomized Controlled trial (RCT) :** The General Anaesthesia compared to Spinal anaesthesia (GAS) trial, the only published RCT, evaluating anaesthetic neurotoxicity in children [3], found no difference in the primary outcome (Full Scale Intelligence Score [FSIQ]) and secondary behavioral and neurocognitive outcomes between the exposed and nonexposed groups, suggesting no effect of brief sevoflurane anaesthesia to the neurodevelopmental outcome at five years age. Limitations of the study: not generalizable to children, undergoing prolonged anaesthesia; receiving multiple anaesthetic agents.
- 2. Observational studies:** While some observational studies have reported an association between anaesthesia exposure and adverse neurodevelopmental outcomes, increased risk of Psychiatric and Developmental disorders, with multiple or with a single exposure, others have not. limitations of studies include significant heterogeneity, variety of outcome measures, different patient populations, types of surgical procedures, age of exposure and heterogeneous anaesthetic administration.
  - a. The Pediatric Anaesthesia Neurodevelopment Assessment (PANDA)** study comparing IQ scores, neurocognitive function, and behaviour in siblings, at 8 - 15 years, of which only one sibling had a single anaesthesia exposure, before 3 yrs [4], found no difference between exposed and unexposed siblings.

## SPECIFIC DRUGS AND EXPOSURE DOSES

While subanaesthetic doses of propofol, ketamine, midazolam, and isoflurane cause neuronal apoptosis in rodent brains, the minimum potentially neurotoxic doses of sedatives and anaesthetics and the number and duration of exposures, is unknown in humans.

## THE FDA WARNING

The US Food and Drug Administration (FDA), in December 2016, announced warnings about potential negative effects on the developing brain from administration of anaesthetics and sedative drugs to pregnant women and children < 3 yrs, for repeated exposures or for procedures > 3 hours [5].

However, due to unclear risk and data based on animal studies, in April 2017, FDA modified their warning, stating that medically necessary procedures in pregnant women and children < 3 yrs should not be delayed and that practitioners should follow their usual practice paradigms [6].

## SUMMARY AND RECOMMENDATIONS

The risk of adverse neurodevelopmental effects from anaesthetic agents in children still remains uncertain. When asked about the risks of anaesthesia, clinicians should state that while children who need surgery and anaesthesia may have worse scores in some neurodevelopmental outcomes these differences are small, with unclear clinical significance, and cannot be attributed to anaesthesia exposure.

**Practice implications:** The potential risks of anaesthesia exposure must be weighed against the benefits of the surgical or diagnostic procedure. Changes in clinical management in children should not be made based on the potential risk of neurotoxicity of anaesthesia, given the uncertainty of any long-term effects of anaesthetics, and the potential for complications, due to avoidance and delay of necessary surgery.

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## Original Research Article

### **A prospective randomized study to compare intrathecal isobaric levobupivacaine with or without fentanyl in various infraumbilical surgeries**

**Rahul Singh<sup>1</sup>, Deepak Mehrotra<sup>2</sup>, Pallavi Singh<sup>3</sup>**

**1 Senior Consultant, Department of Anaesthesiology, Motherhood Hospital, Noida, UP**

**2 Assistant Professor, Department of Anaesthesiology, KM Medical College, Mathura, UP**

**3 Assistant Professor, Department of Anaesthesiology, United Institute of Medical Sciences, Prayagraj, UP**

Spinal anaesthesia is the most common procedure used for infra-umbilical surgeries. The most commonly used drug is 0.5% hyperbaric bupivacaine. However, isobaric levobupivacaine is superior to bupivacaine as it causes less instability of hemodynamics and cardiac function, earlier recovery of mobility and also has prolonged sensory blockade. When used with opioids, the effectiveness of pain relief and anaesthesia is further enhanced during surgery and in the post-operative period. We did a randomized controlled study where 80 patients ASA 1 or 2 were randomly assigned to two groups; Group L (2.5 ml of isobaric levobupivacaine 0.5% along with 0.5 ml of normal saline) and group LF (2.5 ml of isobaric levobupivacaine 0.5% along with 25 µg (0.5 ml) of fentanyl). The outcome was measured in terms of duration of sensory and motor blockade, duration of pain relief, visual analogue scale, fluctuations in blood pressure and heart rate and any adverse effect in any of the participants.

Start of motor and sensory blockade was earlier in group LF. Duration of sensory blockade was more in group LF with motor block duration similar in both groups. No hemodynamic instability or sedation was seen in any patient. The analgesic effect lasted substantially longer in Group LF (336.5 plus/minus 31.3 min) compared to Group L (223.65 plus/minus 32.17 min).

Thus, use of fentanyl with local anaesthetic, levobupivacaine, potentiates its effect and minimises the adverse effects in individuals undergoing spinal anaesthesia.

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## COLS Activity – Jan 2024

Dr Rahul Singh, senior anesthesiologist, Noida conducted a COLS activity, as a part of corporate social responsibility, of a firm, in Jan 2024. A Training Class, Hands on workshop and medical backup at the 35 km CRC marathon, including anesthesiologist's, paramedical support and ambulance services throughout the entire 35 km marathon, to more than 500 participants was provided.

He also pledged to conduct this activity for all levels of society in coming times. He was applauded for his efforts and presented the Guest of honor medal and a shield for the same.



## BLS and First Aid Activity – Feb 2024

ISA Noida GBN successfully conducted BLS and First Aid Training Workshop at Delhi Police Academy on February 2nd, 2024 in collaboration with Metro Hospitals. More than 450 young Police Officers from Delhi, Andaman Nicobar and Goa Police attended. The activity included a talk on BLS by Dr Kapil Singhal, First Aid by Dr Peeyush Chaudhary and Defibrillator by Dr Ankita Sharma respectively. It was then followed by hands on demonstration by the nursing staff from Metro Group of Hospitals along with Dr Kapil, Dr Peeyush and Dr Ankita. Dr Amit Tyagi, CMO Delhi Police concluded the event by vote of thanks and appreciation for the efforts taken up by the branch ISA GBN for conducting BLS activity for Delhi Police trainees.





## Dr Ankita Sharma

Dr Ankita Sharma, Consultant Anaesthesiologist, Neo Hospital, Noida shared the following poem on the Youtube channel of ISA National in an event organised to celebrate International Women's Day, on 8th March 2024, which was highly appreciated.

### WOMAN – A Matriarch?

Life is strange

People are strange

What's on the outside, is not in the inside.

I wonder why?

Life is struggle for all, it is all about how you fight back?

When odds are rocked against you, this is how WOMAN is –

She keep taking the blows and yet manage to stay standing ,

And if she ever gets knocked down ,

people ask her , 'how the hell you have guts to back up and keep fighting?

For the Women, let's end this Stuggle.

Let her take time to relax and enjoy the scenery, sooner or later a natural gust of wind will take her where she wants to be.

कोई भी देश शिखर पर तब तक नहीं पहुँच सकता , जब तक उसकी महिलाएँ कंधे से कंधा मिलाकर न चलें !

आईए ,हम डाले पूँजी आज की नारी शक्ति में , और उनको प्रगति की ओर ले चलें !

नारी शक्ति जिदाबाद 🙏

धन्यवाद



## Dr Poonam Motiani

Dr Poonam Motiani, Professor, Post graduate institute of Child Health, Noida won the consolation prize for her entry "A Paediatric Anaesthesia Conference: a professional dream" in the poem competition organised by Uttarakhand ISA to celebrate International Women's Day.

### A Paediatric Anaesthesia Conference: A Professional Dream

In the realm of medicine, a woman stands,  
With skillful hands and caring plans.  
She organizes, she leads the way,  
In pediatric anesthesia, she shines each day.  
With dedication, she plans and prepares,  
For a conference that shows she truly cares.

Bringing experts together, sharing knowledge and skill,  
Creating a platform for learning, a space to fulfill.

In the operating room, her presence is a light,  
Guiding young patients through their toughest fight.  
With empathy and grace, she eases their fears,  
A true testament to womanhood, through the years.

In every child she heals, a story untold,  
A future shaped, a hand to hold.  
She is woman, healer, warrior of care,  
In her hands, the world, safe and fair.

In organizing a conference, she stands tall,  
A leader, a healer, giving her all.  
Womanhood shines in her strength and grace,  
A pediatric anesthesiologist, in every case.

**Dr Poonam Motiani**  
Professor (Paediatric Anaesthesia),  
Post Graduate Institute of Child Health, Noida

## Women's Day Celebration

Women's Day Celebrations was conducted on 8th March 2024 by ISA GBN in collaboration with Cloudnine Hospital at Cloudnine Hospital, Secto 51 , Noida. Dr Ankita Sharma, Consultant Neo Hospital was the Organising Incharge of the event and the event was attended by about 30 women including doctors , nursing staff and technical team from the hospital. The event was started with a talk on 'Adolescent Hygiene and prevention of cervical cancer' by Dr Ekta Singh, Senior consultant , Obstetric and gynaecology at Cloudnine Hospital, Noida. It was followed by rapid fire round based on Q and A from the talk. A skit was presented by Cloudnine nursing staff on the theme of ' Vaccination for HPV' which was applauded by all the audience. Last but not least, the closing of event was done by Fitness activities wonderfully participated by all the women of all age groups. In all, it was a hit event . Dr Madhu Srivastava, leading practitioner in Obstetrics and Gynaecology and Dr Kamini Jain , leading freelance Anaesthesiologist from Noida were felicitated for their extraordinary work and contributions in their respective field by ISA GBN.




INDIAN SOCIETY OF ANAESTHESIOLOGISTS  
NOIDA GBN  
presents

cloudnine

*International Women's Day Celebrations*

*Awareness with fitness*

1. Talk on Adolescent hygiene & prevention of Cx Cancer by Dr. Ekta Singh, Cloud Nine Hospital
2. Rapid-fire round based on the talk
3. Skit
4. Fitness Competition

DATE - 8th March '24, Friday  
TIME - 4:30 pm onwards  
VENUE - Cloud Nine Hospital, Noida

 Dr. Kapil Singhal (Founder President)	 Dr. Prayush Choudhary (Officiating President)	 Dr. Mukul Kumar Jain (Hon. Secretary)	 Dr. Sameer T. Bolla (Treasurer)	 Dr. Ankita Sharma (Organiser) (Cloudnine Sports Committee ISA GBN)
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## Launch of Climate change awareness campaign



 **ISA U.P. STATE CELEBRATES  
WORLD ENVIRONMENT DAY**

 **CLIMATE CHANGE:  
WE, THE  
ANAESTHESIOLOGISTS,  
CAN MAKE A DIFFERENCE**

**ISA Noida GBN invites you to the launch  
of the above campaign on  
5th June 2024 | 6 – 7 pm | Online Mode**

**ORGANIZED BY ISA NOIDA GBN  
HOSTED BY ISA U.P. STATE**

- Emissions from healthcare: 4-10% of a nation's total GHG emission
- Emissions from perioperative practice: 5% of this number.
- If global healthcare were a country: rank 5 in the world
- The contribution of anesthesia to global warming though small, is measurable & ever increasing.

## The Campaign: Why is it relevant TODAY?

- Why should the anaesthesiologist look to make a difference
- How do we go about making a difference– a probable road map
- Do we want to make a difference?

### PROGRAM



**MODERATOR**  
Dr Kapil Singhal  
(President Elect ISA UP)



**WELCOME ADDRESS**  
Dr Peeyush Chaudhary  
(President ISA GBN)



**ISA UP STATE  
SECRETARY'S ADDRESS**  
Dr. Sandeep Sahu



**SPEAKER AND LEAD  
COLLABORATOR**  
Dr Priyanka Sarkar



**ISA UP STATE  
PRESIDENT'S ADDRESS**  
Dr. Apurva Agarwal



**AUDIENCE  
COMMENTS**



**VOTE OF THANKS**  
Dr Mukul K. Jain  
(Secretary ISA GBN)

Be a part of this change! Click on the given link to join us at  
**6 pm on 5th June** for the 1st-of-its-kind campaign!

<https://us06web.zoom.us/j/87461137013?pwd=PaSThqvMcT7OTe5T0Mb3aH5PTkasCQ.1>



**FOUNDER PRESIDENT ISA GBN**  
Dr. Kapil Singhal



**OFFICIATING PRESIDENT ISA GBN**  
Dr. Peeyush Chaudhary



**HON. SECRETARY ISA GBN**  
Dr. Mukul Kumar Jain



**TREASURER ISA GBN**  
Dr. Sameer T. Bolia



**PRESIDENT ISA UP**  
Dr. Apurva Agarwal



**VICE PRESIDENT ISA UP**  
Dr. Aditya Nath Shukla



**PRESIDENT ELECT ISA UP**  
Dr. Kapil Singhal



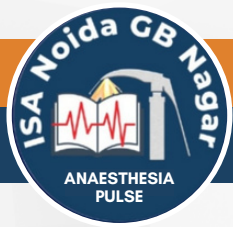
**SECRETARY ISA UP**  
Dr. Sandeep Sahu



**TREASURER ISA UP**  
Dr. Tanmay Tiwari

isanoidagbnagar@gmail.com

www.isanoidagbnagar.com



# Upcoming ISA Monthly Academic Activities



## June

- ESIC Noida
- Hospital Infection Prevention week-12th June to 15th June at Metro Hospitals and Heart Institute, Noida
- Save Environment Campaign launch- UP State webinar by ISA Noida

## July

- Foundation Day CME (Kailash Hospital)

## August

- ESIC Hospital, Noida

## September

- Cloudnine Hospital

## October

- Metro Hospitals and Heart institute, Noida

Volume 1 Issue 3

# *The Anaesthesia Pulse*

The Official Newsletter of ISA Noida GB Nagar



[isanoidagbnagar@gmail.com](mailto:isanoidagbnagar@gmail.com)

[www.isanoidagbnagar.com](http://www.isanoidagbnagar.com)