AMASI Newsletter
(Association of Minimal Access Surgeons of India)

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IN THIS ISSUE

Gurubhashayam

This issue’s Guru is Professor V. N. Shrikhande from Mumbai. He reminisces over six decades of his surgical journey and how things have changed. At the same time, he imparts us sixteen invaluable lessons learnt over a lifetime.

Journal Watch

Dr Amit D Goswami, MBBS, MS, FIAGES, FCLS, FNB(MAS) is a Consultant in the Department of Bariatrics &Minima Access Surgery at Columbia Asia Hospital, Gurgaon. He reviews a landmark publication in minimally invasive foregut surgery.

Writing a Scientific paper

Dr. Nimisha Kantharia, MS, DNB, MRCS (Edin), FNB (MAS) FMAS, FIAGES, FALS (Bariatric Surgery) is a consultant Laparoscopic and Bariatric Surgeon, free-lancing in Mumbai. She initiates this series on reasons why one should make it a habit of writing and publishing scientific papers.

Guideline Series

Dr. Jaisingh Shinde, well-known laparoscopic surgeon and senior AMASI member from Pune presents the first instalment in the phase II of the process of development of AMASI guidelines.

Plus the regular features like:

✦ Hobby corner
✦ Know your Representative
✦ MAS Masti
✦ Upcoming events update
✦ Past Events
From Vasectomy to Whipple's:  
Lessons Learnt on a Surgical Sojourn  
Spanning Six Decades.

A SURGEON, TEACHER AND A PHILOSOPHER - -Dr. Anand Nande

I have had the rare privilege of uninterrupted association with Prof.V N Shrikhande since 1979. I have followed in his foot-steps since my house surgeon days to now occupying the professorship chair which he recently vacated. In his long surgical career spanning 50 odd years he has trained almost 150 young surgeons like me. He is a teacher par excellence. He taught us to treat each patient with dignity and patience and the same patience and delicate handling was reflected in the way he handled the tissues in his surgery. He is passionately fond of Art, Literature and music and has transmitted this passion to his students. A pioneer in the field of G.I Surgery and especially HPB surgery, he is also renowned for his public speaking. His talks are full of humour and his own unique aphorisms which make him a much sought-after speaker. His father ,who was a judge, exhorted him to be ‘an extraordinary surgeon for an ordinary man’. Though he ended up operating on the President of India, he has tried to follow his father’s advice throughout his life. Desire to learn new things, making new friends every day and the insatiable love of life are the qualities which have kept him young even today.He is a role model and a beacon for young surgeons. He has shown by example that it is possible to achieve great professional heights and life fulfillment by practicing with hard work, honesty, integrity and dignity.

I did my schooling in Belgaum, college education in Pune before joining Grant Medical College, Mumbai in 1948. The city was 100 times bigger than Belgaum, and for the first time I heard voices in many languages, sat on a table for food and spoke on phone. Flush toilets were a novelty. Long trousers with shirt tucked inside was a new experience. The sight and smell of formalin in anatomy dissection hall was unpleasant.

I feel grateful to all those men and women who died unsung , unwept and unclaimed. When as an undergraduate student I first entered the operation theater, we were treated as unwanted obstacles . I knew that one day I will be surrounded by observers when I will make students scrub up to assist me ; I am happy that some of these students are now well known surgeons in India and abroad. I went to UK in 1957 by ship. More than 60 relatives and friends took a chance to enter the ship to see my cabin. Going abroad and air travel was not common at that time. I passed FRCS Edin and London at the first attempt, which was not expected for an average student like me.

I joined a busy hospital on 12 June, 1959. My consultant said “ You wanted experience. We welcome you with a lady waiting for cholecystectomy . I have to go to London and the chief has gone to Europe for holidays. You are alone in the hospital. All the best ’.

The patient, an old frail lady, said “Doctor, I am told this is your first day in the hospital but I am lucky I am being opearted by a surgeon who is a double FRCS surgeon without a failure.” I was a changed man the next day; thorough preparation. caution and confidence became my companions in a challeging career. I remembered her in 2001 when I became the first President of International HPB association, Indian Chapter.

Lesson I: Thorough preparation, adequate caution and a strong self-belief form the foundation stones of good surgeons.

I did not hesitate to take operative atlases of Rob and Smith to OT and when needed, my anaesthetist would help me. This was not the right way to learn surgery but the only way available then. Ideal way to learn was not available and what was available was not ideal. I divided
CBD twice in hundreds of cholecystectomies; my first mishap occurred in 1993, 34 years after my first cholecystectomy.

Great stress was placed on record of clinical findings and operative findings. Letters were sent to every referring doctor and a copy was placed in the file which were available years after discharge even in district hospitals. This is missing today in India even in computer era. The rise in court cases against doctors has matched the fall in record keeping.

Nursing staff was respected and anaesthetists were treated as equals. The consultant would meet the sister in charge before the ward rounds, Operation theaters would start in time, talking with the patients relation before and after surgery was our responsibility. Shouting in the operation theater which was said to be common was absent in all the hospitals where I worked.

I took a long time for hemicolectomy on an elderly sick patient because the staff nurse was incompetent. I met the matron to report to her that such poor assistance increases the risk to patient's life. She replied coolly “Doctor, we at times assist doctors who do not know how to operate but do we ever complain ?“

How did this happen ? The President had a massive recurrent inguinal hernia but had health problems and was advised to go abroad.

I was chosen because I was doing hernia surgery under local anaesthesia since my resident days in Bombay since 1954. Residents could not operate on cases requiring general or spinal anaesthesia. I found a window of opportunity by doing operations under local block with the help of an enthusiastic anaesthetist and a cooperative theater staff.

When I was working as a resident surgeon in UK in 1959, a patient admitted with heart attack got strangulated hernia on the 4th day of admission. He was operated by me under local and the next day there was a news all over the hospital that a young Indian surgeon has successfully operated on a patient with myocardial infarct. The first successful Ramstedt's operation was done on a new born baby by me in GT Hospital under local in 1968. That patient must now be a lady of 50!
After practising for 10 years in Mumbai, I felt I should visit some excellent centers in UK to observe how master surgeons work. I was popular for doing Millin Prostatectomy but the operation would always take more than 1 hour. I do not remember the name but one surgeon had a reputation of doing it within 20 to 30 minutes. I attended his sessions. I was impressed with military like discipline and team work. The operation trolley had less than 10 instruments (I had to sketch the trolley because era of smart phones was about 40 years away), the positioning of the patients and lights were excellent, cautery never failed. Important thing was surgeon was not fast but with every step, the operation progressed with precision. Sounds very basic and simple but to create teams is very difficult in a society which is not used to discipline.

I had similar experience while assisting Norman Tanner. He would complete gastrectomy within 1 hour. He was a leading surgeon in 1971 known for his contribution in managing load of peptic ulcer epidemic during the bombing on London in World War. He gave me a lift after the operation in his chauffeur driven Rolls Royce. After he dropped me off at Russell Square, I said “I had heard your name during my Fellowship exam. I will remember this day in my life because I could assist you in surgery. Your name will always be there in Golden letters whenever anyone writes a monogram on gastrectomy.” With a gentle smile he said, “Thank you young man for your comments, but please remember that removing a burst appendix in a small town in India would be a more gratifying operation than doing a gastrectomy in London.”

My consulting room was my waiting room. Family planning programme was in full swing and I took active part because I found something to do. Government was happy that a surgeon was taking interest in Family Planning work. Instruments used for vasectomy were very crude. I got small Allis & mosquito forceps, fine pointed needles for infiltration of local and showed how to do vasectomy with minimal pain. The cost of the set was less than 70 rupees.

Lesson VII: Good surgeons are identified by their surgical precision. Great surgeons are characterised by additional humility and wisdom.

When I started my career I was told that days of honest practice were over, I should go back to UK or be a part of unethical practice. I never believed them. I had heard about well-known consultants in J J Hospital, Bombay known for their integrity. I was staying with my parents in a joint family and I was willing to wait. My father, who was my hero, wanted me to be an extra ordinary surgeon for an ordinary man and maintain integrity.

A patient from Middle East wanted a certificate from me, advising him not to undertake any journey for 10 days. Why did he choose me? Certificate signed by FRCS is never doubted. He was willing to pay me a sum which was more than my one month’s income from consultations. I refused and could sleep well without any guilt.

Lesson VIII: ‘Satyamev Jayate’ means Truth Liberates, and not triumphs, as many believe.

The Government of India appointed me as the technical adviser, WHO sent me to conduct a conference in Dhaka, I gave lectures even abroad, demonstrated operation in London and I was interviewed by BBC London.
With biliary surgery came pancreatic work. Familiarity does not always breed contempt; in our profession, it brings content. Time came when I was invited for lectures mainly on Gall bladder and Pancreatic diseases. I became well known across the country as a Gall bladder and Pancreas specialist.

I have stammered throughout my life and knew that it was a big handicap; only having skillful pair of hands is not sufficient. I had heard Aneurin Bevan, the British Health Secretary giving an impressive talk at the anatomy hall of Grant Medical College in 1951. He got standing ovation after repeated applause, inspite of his handicap!

Perhaps on that day, I must have nurtured a thought that one day I will become a speaker. All that I had to do was to stand before a mike and talk. That is what I exactly did and became known as a good speaker.

I was lucky that I came in contact with many other pioneers, starting with Mr. Alfred Gregory in UK, the man who was in the first successful Mt Everest Expedition and renowned photographer of international fame. When I asked him what are his thoughts when he reaches the top, he said “ How to come home and be with my wife.” He explained that every ascent has risks and by sticking to the mantra of “Never cross the point of no return”, he had been able to return from dangerous situations where several fellow mountaineers had succumbed. This stress on safety in our professional life made me establish and popularise the Fundus First cholecystectomy.

One of the dreaded mistake a surgeon fears is operating on a wrong side.

The reason for this mishap was because the patient had not brought my clinical notes, he was admitted under a urologist instead of me, my resident did not examine him and the urology resident’s handwriting was confusing, the anaesthetist was new and I saw him when he was under sedation.

To make matters serious, the patient's son was a high court judge. I accepted my mistake and did the operation next day and avoided all the legal complications and mental torture.

I am lucky to have been born in India which is an ancient civilisation that has given shelter to many faiths, has a great past, is studded with diversity but has an underlying theme of common bonding. It was my good fortune that I became a surgeon, and got a teaching hospital attachment in Bombay, where poor patients were treated free. It was an era of clinical medicine when we looked in patients' eyes, listened to them, touched them. It was an era of faith and consent for operation was taken in one line. There was continuity of treatment and nothing like working a limited number of hours a week. As industrial revolution made man into machine, I fear that we are becoming technicians treating virtual patients.

Surgery is a performing art and like many performing artist's surgeons can become victims of success and adulations. Dr. Christian Bernard once said that ' Anyone who does not like applause and recognition is either a fool or a liar'. Lifetime achievement citations, orations, demonstrating operations, lectures before packed audiences, individuals wanting to be photographed with you, contacts with the high and the mighty are all exciting experiences but they fade away quickly. What gives us a great source of satisfaction is what we have given back to the society like our services to the sick, teaching students, training surgeons. The life of one human being is insignificant in the larger scheme of things, but it is long enough to do good work. One Ramakant Achrekar who passed away a few days ago, could contribute so much to Indian Cricket.

Some years ago, I had a letter from a student –

"Sir, I was your student in surgical term for 3 months. I married last week, and I am happy to inform you I did not
take dowry. Dowry is a status symbol in my community, my parents were deeply hurt and my in-laws felt insulted but I remained firm. Thank you for inculcating values in our minds. Two of my friends have also decided not to take dowry.”

Lesson XIV: As teachers, our responsibility does not end by training youngsters to become good surgeons, we also have to inculcate values in them to make them better human beings.

Some of my residents are doing excellent professional work, continuing the traditions of ethics, excellence and humanism. Many of my students have gone on to pioneer in their fields. When they call me up to express gratitude about my influence in their careers, these form my precious memories and possessions which no authority can tax.

I wrote two books. The first one was in Marathi, which was a best seller for 16 weeks and is still read on All India Radio repeatedly by popular demand. The book was to educate people about their health, surgery and how to avoid unnecessary medical consltations. After that, I received hundreds of requests from parents that their children do not know their mother tongue and I had to write it again in English! Sad but true.

My father wanted me to be an extra ordinary surgeon for an ordinary man; I did not fail him. I missed him when I operated the President but luckily my mother was alive to experience the proud moment.

I will be 88 this week. I am still active, read something new every day, meet interesting people and continue to get invitation for lectures. Living in old age in the world that has changed beyond imagination is a survival skill. My phone which used to ring continously goes frequnetly into hibernation but I make two telephone calls daily on my own to remain connected in life. My friends have left for a journey of no return. I continue to live a life of gratitude and contentment. I am in the departure lounge to the unknown and the unknowable destination, without any passport, foreign exchange and baggage of regrets. Expected time of departure is imminent but undisclosed.

I am reminded of George Bernard Shaw's commentary in Man and Superman “Life is not a trifle. It is a splendid torch handed to me by the past generations, I will make it burn brighter before handing it to the next generation.”

Books published

Final Lesson: Till the end comes, I have time to enjoy and reflect on life, this Wonderful Life that took me to unknown heights!!
The TEMPO Trial at 5 Years

Transoral Fundoplication (TIF 2.0) Is Safe, Durable, and Cost-effective. Trad KS, et al.
Surgical Innovation 2018, Vol. 25(2) 149–157

Analysis:

Introduction: The TIF 2.0 procedure (esophagogastric fundoplication) performed with the EsophyX2 device (EndoGastric Solutions, Redmond, WA) has emerged as a safe and effective therapy for chronic gastroesophageal reflux disease (GERD) in patients with minimal anatomical deterioration of the gastroesophageal junction and the diaphragmatic hiatus.

Objectives: To assess long-term clinical outcomes of TIF 2.0 procedure, beyond 3 years in patients in the United States. It is expected that the determination of reoperation rates 5 years post-TIF could offer preliminary cost comparisons for the TIF procedure versus laparoscopic Nissen fundoplication (LNF). Also, to see the role of TIF 2.0 procedure in the anti-reflux armamentarium in select patient.

Trial Design: This was a randomized, multicenter, open-label study, with a crossover arm, carried out at 7 community-based practices in the United States. Eligible patients, were randomly assigned to receive either TIF 2.0 or maximum dose PPI therapy with a target allocation ratio of 2:1. After their 6-month evaluation, all patients in the PPI arm elected to undergo the TIF 2.0 procedure. Therefore, for the purpose of this report, each patient served as his or her own control as compared with the baseline assessment.

Inclusion Criteria: Chronic GERD patinets with daily troublesome regurgitation and/or atypical symptoms refractory to PPI therapy, pathological esophageal acid exposure confirmed by 48-hour pH monitoring off PPI therapy and history of PPI use for at least 6 months were included in this study.

Exclusion Criteria: Patients with hiatal hernia >2 cm, Hill grade III or IV, esophagitis of Los Angeles Classification grade C or D and Barrett’s esophagus >2 cm were excluded from randomization. Furthermore, patients with class 2 or 3 obesity (body mass index [BMI] > 35 kg/m2), esophageal motility disorders, and previous gastric or esophageal surgery were also excluded.

Intervention: All patients in this study underwent the standard TIF 2.0 procedure using the EsophyX2 device under general endotracheal anesthesia. The TIF 2.0 procedure created a full-thickness, partial gastro-esophageal fundoplication secured above the Z-line with polypropylene “H” fasteners that were delivered through the thickness of the apposed stomach and esophageal walls. The length and circumference of newly built TIF 2.0...
gastroesophageal valves was determined by performing an immediate post procedure endoscopy and using well-described standardized methods.

**Conclusion:** More than two-thirds of patients remained off daily PPIs 5 years after undergoing the TIF procedure. It appeared to be cost-effective in comparison with Laparoscopic Nissen fundoplication too. In the appropriate patient population, the TIF 2.0 procedure could be considered the definitive alternative therapy to PPIs in a majority of patients undergoing the procedure.

**Commentary:**
In this multicenter study, 63 peoples from TEMPO trial, were examined for long-term clinical outcome after TIF 2.0. In this study, patients were randomized in TIF 2.0 or PPI group. There was certain doubt in with about the long-term efficacy of the TIS 2.0 procedure, hence in this study 5 years evaluation was done pertaining to patients having TIF 2.0 procedure. In selective patients, it may be a good option to deal with patients having GERD refractory to PPI.

**Major limitation of the paper:** One limitation of this paper is that, they didn't perform functional test and endoscopies at 5 years. Moreover, results are reported regardless of the PPI use in the post procedure assessment. In addition, a large segment of patients normally encountered in clinical practice, viz. those with hiatus hernias > 2 cms and those with BMI > 35 kg/m² were excluded from the study and the findings do not apply to them.

**Takeaway point:** In selected refractory GERD patients, TIS 2.0 may be a cost-effective alternative to Laparoscopic Nissen Fundoplication
Over a decade ago, as a post-graduate student, struggling to finish ward work and barely finding the time to read my standard text-books, I hadn't a glance to spare for medical journals. My interest in reading/writing case reports was sparked by two emergency surgeries in my second year of residency the first of which was a 40 years old gentleman with perforation peritonitis, secondary to a ruptured ileal tumor, which was diagnosed as gastro-intestinal stromal tumor (GIST) on histopathology. The second surgery was on a 50 year old man with intestinal obstruction due to an ileo-caecal intussusception. I was both surprised and delighted when the histopathology revealed a caecal lipoma. My standard text-books did not have as much information on these topics as I craved, leaving me to turn to medical journals for the first time. I discovered that similar cases had been previously reported, and that there were even cases series. Although I gathered a lot of information, I did not end up writing them up, much to my subsequent regret.

Further on, during exam preparatory leave, I finally found the time to frequent the college library. That was when I discovered the beauty of a well-written review. Attempting to assimilate my three years of clinical experience with the dry theory in surgical text-books was not easy. I realised that for certain topics which were not well covered in text-books, I could access a comprehensive overview by reading journals such as Surgical Clinics of North America and the Recent Advances. It took a few more years for me to grow from a mere consumer of medical scientific information to one who contributes in my own small way, by writing and reviewing articles. I believe it is essential for each of us to contribute, irrespective of the stage of career and setting of our practice. By sharing with you the reasons for my conviction, I hope to convince you of the necessity and benefits of scientific writing.

1. To assimilate new experiences.

The primary motivation to write should be for one's own sake. When confronted with a clinical scenario, we are often compelled to act in that moment, to make immediate decisions based on our intuition and logical understanding of what should be done.
To write down a case, after the flurry of the moment has passed, allows one to gather one's thoughts, to reflect, to look back and judge the soundness of our decisions, consider all possibilities and outcomes, as well as other options we could have chosen. In short, writing affords an opportunity to truly assimilate and integrate an unusual case into one's experience.

2. Compels one to read and expand our knowledge.

Most of us try to keep ourselves updated regarding advances in the medical field. However the research one does in order to write up a case is different.

The clinical case itself provides a context for new knowledge. There is a sense of immediacy; one's mind is focussed by the clinical scenario at hand, allowing one to appreciate all the nuances of the case and better retention of new facts.

3. Makes one analytical.

While writing up a case report affords an opportunity for reflection, when we write up a case series, a clinical trial or even a retrospective observational study, we are compelled to analyse data scientifically and statistically. This forces us into a more rational and logical way of thinking, which is distinct from the usual way we function as clinicians. It helps to strip away our biases and ushers instead the art of thinking clearly.

4. Sharing of medical knowledge.

One can justifiably state that it is part of our duty as medical professionals to share our clinical experience and add to existing medical knowledge. Once we adopt this perspective of and realise we are making a valuable contribution to the field, it is easier to write.

Perhaps your institution is a referral centre for a certain type of cases, or there is a geographical preponderance of a particular disease in your area. Even writing an observational series would add tremendously to the body of literature available and would prove a great boon to those who treat these cases only occasionally.

5. The eyes cannot see what the mind does not know.

The medical field is one where the stakes are high, and even minor mistakes are unforgivable. At the same time, the only way to get better in this profession is by gaining experience, which often includes making mistakes.

While reading an article cannot substitute personal clinical experience, it is definitely a value addition, opening one's mind to possibilities which one may never otherwise have considered.
6. Improves academic standing.
While we are primarily clinicians, writing scientific articles is a great way to bolster one's academic credentials. By writing one moves out of the clinical sphere and onto a scientific platform, connecting with the global medical community at large.

It is boost to one's self-confidence to see one's name in print, in that typical format of surname first followed by one's initials.

Seeing an article through conception of the idea, data collection, writing, re-writing and multiple edits is an arduous task, and the glow of pride that comes from receiving the final article proofs, is well deserved indeed.

8. May help in medico-legal situations.
A renowned senior professor once said that a case report written by him as senior resident on diaphragmatic hernia, was used to establish him as an expert in the field of diaphragmatic hernia repair, sparing him from negative medico-legal consequences in a case several years later. While I am no lawyer, and I cannot guarantee that your writing will protect you in a court of law, it definitely adds definitely to your clinical and academic reputation.

In conclusion, writing a scientific article is hard work, all the more so because it means we have to take time out of our busy clinical practice to do so. We have to move out of our comfort zone of attending to patients and operating, and really carve time out for this activity. It is also often a long drawn-out process.

I have articles published that took a full two years from conception of the idea, to data collection, statistical analysis, not to mention endless reviews by the journal, before it was accepted. But once it is published you have left behind an ever-lasting impression, one may even say a legacy, and that is what makes writing totally worth it.
The Process of Guidelines and Position Statement Formation under AMASI was envisioned in four phases:

Phase I: An expert reviews available evidence on each topic and suggests guidelines/position statement.

Phase II: The suggested guidelines/position statements are presented before a panel of experts who then critically evaluate them and suggest any amendments, if needed.

Phase III: The amended guidelines/position statements are presented before the members of AMASI through the newsletter and comments are invited, based on available evidence in published literature.

Phase IV: Once all the comments are analysed critically in light of the evidence submitted, any changes, if required are made and the final guidelines/position statements are released.

What follows is the phase 3 in the Guidelines and Position Statement Process of AMASI.

The AMASI members are requested to carefully go through them and if required, any changes can be suggest along with the evidence supporting such changes. Your suggestions along with the relevant references can be emailed to amasiguidelines@gmail.com

**Laparoscopic Operation Theatre setup**

**Introduction:** An operation theatre (OT) complex is the heart of a surgical unit. Theatre planning and setup is therefore of paramount importance.

The following points need to be considered while planning the construction of an OT:
- Location
- The number & size of the OT
- Doors
- Surface/Flooring
- Walls
- Operation Table
- Electric points
- X-Ray illuminators
- C-arm facility
- Scrub area.

**Recommendation 1:** All equipments should be functional and calibrated before the scheduled surgery. Preferably, a dedicated staff member should be allotted this duty: to check all the electronic and mechanical equipments like camera, monitor, insufflator, light source, anesthesia trolley, suction machine etc. prior to commencement of surgery and ensure that they are working.

**Recommendation 2:** The OT should be ideally spacious. There is evidence to suggest that crowding adversely affects the ability of a laparoscopic surgical team. The recommended minimum size of the operation theatre is 6.5m X 6.5m X 3.5m. This is necessary to accommodate the gadgets and prevent crowding. Preferrably one wall should have a fixed glass window with a view of the exterior which makes the atmosphere positive and pleasing. The glass should be heavily tinted or covered with a dark film so that it does not hinder the image on the camera monitor.

**Recommendation 3:** The different zones of a laparoscopic OT complex do not differ from the standard norms set for the open surgery, open surgery, as far as the location, zone wise distribution, ventilation and temperature control are concerned.

**Recommendation 4:** Pendant services are recommended, as they contribute towards reducing the clutter over the theatre floor. Pendant services should have adequate electrical sockets. Two ceiling pendants should be designed; one for the surgical team and the other for the anaesthetist.
Surgery is performed via electrical gadgets requiring long wire connections. Loose wires along the floor can cause accidents which may be prevented by the use of pendants. Anaesthesia pendant should be retractable and have limited lateral movement and provide a shelf for the monitoring gadgets. It should have outlets for oxygen gas, nitrous oxide gas, four bar pressure medical compressed air, vacuum and preferably four electric sockets.

**Recommendation 5:** Medical grade gases should be preferably supplied to the operation theatre through individual dedicated pipelines. This keeps the theatre free from multiple cylinders of oxygen gas, nitrous oxide gas and carbon dioxide gas.

Moreover, one cylinder of each filled with the above gases should be available in the OT complex in case of failure of the pipeline, leakage of the pipeline or any other emergency.

**Recommendation 6:** Electrical fittings should be grounded and need to be connected to the emergency system with an efficient changeover facility. Laparoscopic surgery is exclusively dependent on its electrical gadgets and an uninterrupted power supply is required.

**Recommendation 7:** Operation Table:

a. Operating Table should have a facility for height adjustments and tilting in all directions.

b. It should be preferably remotely controlled, with provision for manual over-ride, simple to manipulate and the most novice staff member in the OT should be able to operate it. Laparoscopic surgery requires a frequent change of position of the patient from Trendelenberg to reverse Trendelenberg as well as raising and lowering of the right or left side and these manoeuvres should be done easily.

c. The table should have safety measures like straps, shoulder braces, foot stops and security measures to prevent patient from falling.

d. It should have various modular attachments to allow for lithotomy and modified lithotomy and/or leg split positioning of the patient.

e. Height of the table should be between adjustable between 64-77cms above floor level since the discomfort and operative difficulty are lowest when instruments are positioned at elbow height and it is ergonomically comfortable.

f. The other aspects are prevention of nerve pressure and dependent pressure point injuries by using proper placement of pillows and pads, which should be available in the theatre.

**Recommendation 8:** Major surgeries require compression bandages/sequential compression leg pumps to prevent DVT and warmers to keep the patient warm and these accessories should be available in the OT complex.

**Recommendation 9:**

**Trolleys/Cabinet – The Laparoscopic ‘Stack’**

Laparoscopic equipment should be arranged in a vertical array in a specialized stack, if pendant services are not available. The monitor should be placed opposite to the surgeon at about 25 degrees below the horizontal plane of eye and at a distance of around 4 feet. It should also be comfortable to the camera surgeon and other assistants.

It is not advisable to have a chin up position for the surgeon. The cabinet should also hold the insufflator, light source so that any changes could be quickly and easily noticed by the surgeon. The electrosurgical unit also should be strategically placed and care should be taken that the cable wires do not get entangled. There should be a different trolley for the nursing staff to place their instruments and conveniently assist the surgeon. Minimum equipments should be kept on the floor to prevent them from getting damaged.

**Recommendation 10:** Ventilation and temperature-

Temperature should be around 18-22 degrees Celsius with a humidity of 40-50%. Air conditioning should be provided with 10-12 air exchanges per hour. Fans should be avoided in the operation theater as they lead to accumulation of dust, which is difficult to clean.

**Recommendation 11:** Anaesthesia Equipment-
The anesthesia trolley, ventilator and monitoring equipment should be purchased in consultation with the regular anesthesia team members. Equipment that monitors non-invasive blood pressure, ECG, oxygen saturation and end-tidal CO₂ is recommended along with a defibrillator for emergency resuscitation.

**Conclusion**

Designing of an operation theatre complex is a major exercise and is mainly intended to benefit the patient. The need for safety, convenience and economy will guide the planning of a modern operation theatre complex, whatever the size, number or the speciality. However, new OTs and hospitals that are being established cannot be expected to fulfill all theoretical requirements as new ideas are constantly being developed. By the time they are incorporated into buildings, fresh ones take their place on the drawing board.

Any surgeon would definitely like to work in an ideal environment but one has to encounter many variables and optimize the resources available. Due to financial constraints and paucity of space, surgeons may need to adapt the recommendations above in a way that is most suitable for their circumstances, keeping the best interests of the patients in mind.
Our AMASI Treasurer is a shy and introverted guy, which is why his amazing talents were hidden from all of us, though we have known him for the last several years. A true artist’s soul abides in his lanky frame as he loves to read, listen to music and sketch. His sensitivity is reflected in his art - he loves to depict artists and he does it so well that the personality of the artist seems to imbue the canvas. Apart from these, he loves to travel and is handy with a camera. His approach to life is evident in his personality: simplicity, honesty and dedication. His goals in life are simple: a life dedicated to serve the humanity, especially the needy.
The past month has been academically very satisfying. Starting with the Nagpur Skills course, we then travelled to Mandalay in Myanmar to do an operative workshop at Mandalay General Hospital. Inbetween, we squeezed in a CME in Imphal, Manipur. The trip to Mandalay was an adventure in itself as we all assembled in Imphal and then travelled by road all the way to Mandalay, which was a 22 hour journey. The Asian Highway-1 construction was in full swing and unseasonal rains had converted stretches of our road into muddy slides where our vehicle simply slipped and swerved all over. We then had a very satisfying interaction with Prof Shein Myint and his department of Surgery, at Mandalay General Hospital, where we performed some 12 surgeries over a span of two days. After that, was Laparocon2019 at Rajkot, followed by an operative workshop at Ludhiana, where Prof Palanivelu delivered the F C Eggleston Memorial Oration. After this, a couple of our members visited JIPMER, Puducherry where we are initiating exciting training programs under the mentorship of Prof Biju Pottakat.
The team ready to embark on its bus journey to Mandalay

Using all modes of transportation available in order to spread the message of MAS for the masses

Rajapandian at Nagpur Skills Course

Legends deliver orations in memories of legends!

Navneet Chaudhry organized a very successful workshop and oration at CMC Ludhiana.

The Theatre certainly gets crowded when Prashant Rao is there

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**Prashna India**

Dr VK Kapoor, Professor of Surgical Gastroenterology at SGPGIMS Lucknow, a member of AMASI, has launched a FREE online education portal - Prashna India - where students/ surgeons can ask (post) their questions. The questions are answered by experts in respective topics/ areas and the answers are posted online.

In the last 5 years, more than 300 students/ surgeons from all parts of India have asked more than 700 questions which have been answered by more than 70 experts from India as well as abroad. These questions and answers are available on Prashna India website for free.

Prashna India also conducts live online case presentations/discussions and open-house question-answer sessions called Ru-Ba-Ru. More than 25 such sessions have been conducted so far with a maximum of 44 students from 22 centers attending one such session. Audio recordings of these sessions are available on request. Videos of last two Ru-Ba-Ru sessions are available to view on Facebook site of Prashna India 29th January and 3rd February 2019.

Prashna India can be visited at [http://prashna-india.weebly.com/](http://prashna-india.weebly.com/)
## Upcoming Events

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<th>Event</th>
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<td>FMAS Skill Course &amp; Examination</td>
<td>Mumbai</td>
<td>31st May-2nd June, 2019</td>
<td>Dr. Sameer Rege</td>
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<td>Operative Workshop</td>
<td>Nazareth Hospital, Shillong</td>
<td>1st-2nd August, 2019</td>
<td>Dr. Jayanta Kumar Das</td>
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<tr>
<td>FMAS Skill Course &amp; Examination</td>
<td>Shillong</td>
<td>2nd-4th August, 2019</td>
<td>Dr. Jayanta Kumar Das</td>
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<tr>
<td>FMAS Skill Course &amp; Examination</td>
<td>Gurgaon</td>
<td>6th-8th September, 2019</td>
<td>Dr. Anshuman Kaushal</td>
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<tr>
<td>FMAS Skill Course &amp; Examination</td>
<td>Bengaluru</td>
<td>27th-29th September, 2019</td>
<td>Dr. Srikantiah</td>
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<tr>
<td>FMAS Skill Course &amp; Examination</td>
<td>Jaipur</td>
<td>11th-13th October, 2019</td>
<td>Dr. Rajendra Mandia</td>
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<tr>
<td>AMASICON2019</td>
<td>Nagpur</td>
<td>7th-10th November, 2019</td>
<td>Dr. Prashant Rahate</td>
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</table>

For more details visit [www.amasi.org](http://www.amasi.org)
5th ADVANCED LAPAROSCOPIC SURGERY
LIVE WORKSHOP CUM CME
(1ST & 2ND AUGUST 2019)
ORGANIZED BY NAZARETH HOSPITAL, SHILLONG IN ASSOCIATION WITH
NORTHEAST CHAPTER, ASI (NECASI) AND AMASI
To be followed immediately by:
64th AMASI Skill Course & FMAS Examination (2nd to 4th August)

CASES (DEPENDS ON AVAILABILITY AT THAT TIME)
Lap CBD Exploration  Lap Pancreatic Cysto-gastrostomy  Lap Fundoplication
Lap D2 Gastrectomy   Lap Ventral Hernia Repair    Lap RLU
Lap TVGJ             Lap TAPP & TEP Repair of Hernias  VATS Bulectomy
Lap Right Hemicolecotomy  Lap Stump Cholecstectomy

WORKSHOP FACULTIES:
B S PATHANIA, KALPESH JANI, R PARTHASARATHI, MANOJ KR CHAUDHURY,
JUGUNDA SOROKHAIBAM, JAYANTA KR DAS

VENUE: NAZARETH HOSPITAL AUDITORIUM

For more details visit www.amasi.org
Welcome to Nagpur

AMASICON2019
7 - 10 NOVEMBER, 2019
Suresh Bhat Auditorium, Reshimbag Ground, Nagpur

CONFERENCE SECRETARIAT
Dr. Prashant Rahate
Seven Start Hospital
Jagnade Sq., Nandanvan, Nagpur – 440009
Contact No : +91-9822464068
Email : amasicon2019@gmail.com, prashantrahate84@yahoo.com

For registration and more details visit https://amasicon2019.com/

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