Sri Lanka Association of Minimal Access & Digital Surgeons

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Editors

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Message from the President - SLAMADS

My dear friends,

When we are reaching towards the end of 2024 ,SLAMADS can be proud for what it has been doing to improve the minimal access surgical training in Sri Lanka. In addition, we have looked in to patient safety as one of the key aspects in surgical training.

The precongress workshop of the annual academic sessions of the CSSL, organized by SLAMADS on “Enhancing Surgical Performances” conducted by Prof.Tan Arulampalam and Dr.Katharine Daniel was very well attended by surgical trainees and the feedback we got was an eye opener to the surgical practice in Sri Lanka.

I take this opportunity to thank all the coordinators of the precongress workshops conducted by SLAMADS. All of them were very well attended. As the President of the SLAMADS I greatly appreciate the commitment made by all the resource persons of those precongress workshops ,plenaries and the symposia during the annual academic sessions of the CSSL in last September in Kandy.

Through collaborations with the regional associations, SLAMADS members got the opportunity to present their work in international forums and have been invited to deliver lectures. I would like to reiterate the importance of recording the surgeries and maintain a database of the work we do. This will open the way to scientific publications which most of our members are lacking despite the enormous workload we handle.

On the 8th of October SmartGlass project was launched at the CSSL and SLAMADS is planning to use this tool in our mentoring programme of peripheral surgeons. If we overcome the red tapes of using this tool in surgical training and mentoring in Sri Lanka, we will be able to cater surgeons working in peripheral areas of the country to develop their skills in Minimal Access Surgery.

Association of Minimal Access Surgeons of India (AMASI) have initiated a discussion to have a joint Minimal Access Surgery Conference involving all the minimal access surgical associations in the region as stakeholders. This will be another golden opportunity for all of us and I am expecting this will be a reality in near future.

The SLAMADS members will also get the opportunity in getting themselves trained in overseas centers in the near future for specific areas of MAS in the smart centers and also get partly sponsored fellowships in centers of excellence. This is in addition to the KSERS fellowship we are getting since 2023 and it has been advertised for SLAMADS members for the year 2025.

I have taken the initiative to develop a training fund for our members who can utilize it to partly fund their overseas training programmes on MAS. I humbly request all our members to support to build this fund through individual contributions or through well-wishers.

In January 2025 SLAMADS will be having its Annual General Meeting and the date and the time will be informed to all our members in time. I take this opportunity to request all of you to attend this event which will be followed by a fellowship gathering.

Prof. Bawantha Gamage
President, SLAMADS

Dreams becoming reality; living through development of minimal access procedures

Since the first laparoscopic cholecystectomy was reported in 1985, enthusiasm developed to perform a wider range of procedures by minimal access. Reasonable amount of scrutiny took place to make sure of safety when changeover was happening.

A concept comparing trauma of procedure to that of exposure was brought in. For surgeries like cholecystectomy and appendicectomy, with limited trauma of dissection, minimizing trauma of exposure by avoiding a large exposure wound, the advantage of laparoscopy was clear. In contrast for major resections, where trauma of dissection was substantial the benefit of taking away the trauma of exposure was questioned. In addition, for cancer resections, oncological adequacy was a concern.

However, many other advantages of minimal access surgery became evident, not merely reduced size of incision. The clear view possible with magnification and zooming as well as a more favourable angle of vision are advantages.

This allows dissecting through blood less planes easily, which is further facilitated by gas getting in to and opening up planes. Often minimal access procedures are associated with reduced blood loss. Longer operating times, initially noted became similar or reduced with experience.

For adrenalectomy to be performed laparoscopically, the experience of surgeons mobilizing bowel laid a foundation. First reported in 1992, now has become the gold standard approach, if not contraindicated. The European Society of Endocrine Surgeons (ESES) recommends open adrenalectomy (OA) for adrenocortical carcinoma (ACC) and cancers of 8 cm or greater in size.

Over the past two decades, laparoscopic adrenalectomy happened in many Sri Lankan teaching hospitals. With adequate training, it is nice to note laparoscopic adrenalectomy being reported from regional hospitals.

There is no doubt that pancreatic resections are complex, which are being performed by minimal access in many centers, with the first report in 1994. Robotics has facilitated the performance of pancreatic resections.

An expert HPB surgeon, who has lived through the development of minimal access surgery has provided his point of view on minimal access pancreatic resections, through firsthand experience, in this issue.

Editors

Point of View

Minimally invasive pancreas surgery

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The advancement in minimally invasive surgery (MIS) has been tremendous in the past three decades. I remember being in the middle of my residency when I stepped out to pursue research for two years and came back to this new thing called “laparoscopy”. Prior to that, my faculty’s surgery list read something like: Open cholecystectomy, open cholecystectomy with bile duct exploration etc. Now this “lap chole” moniker was gaining traction, and I did not understand this. Moreover, these cases were two faculty and a chief resident- type cases.

How things have changed… Now we have robotics and other techniques for minimal access surgery. It would have been impossible to imagine a world where a robotic or laparoscopic pancreaticoduodenectomy (PD) would have been reality. And a world where I could do this? Impossible…

- Well, here we are…
- A few principles must be adhered to when developing an MIS program. These are more critical in the arena of HPB surgery:

1. Always obey the same principles as open surgery- this means that oncologic surgery must remain pure, and the dissections must be identical if not better.
2. Do not change the indication for the operation just because you can do it MIS. This is a critical issue: many will do liver resection for a peripheral hemangioma in an MIOS fashion just because the scars are less. It is rarely required to resect a hemangioma and just because the surgery is less invasive does not change the indication.
3. Always have someone who can help you. There are times when there may not be a senior HPB MIS surgeon in your program. In this case, there maybe a MIS bariatric surgeon that is excellent at the MIS skill set. You will bring the HPB expertise and together you can make a beautiful team.
4. Start easy and plan to convert. Conversion should never be treated as a failure. Completing an MIS surgery in an MIS fashion must not be treated as a trophy to win.
5. Set a time by which you need to have made progress to a specific place in the surgery. For example, the clipping of the duct must happen by the one-hour mark for a lap chole for me not to consider changing tactics. Usually, a longer case suggests that there is something different about the case that you are not seeing. I would convert to open at this point.

6. Have a team around you with which you are familiar. This is not the time to have a new scrub tech in the room- use the team that knows you.

7. Recognize when you are getting frustrated and consider changing strategy. This is true in open cases, but so true for MIS cases. One strategy is to change the area of dissection. My trainees often say that I find point A and B and connect the dots. If B cannot be found, then find C and connect A to C.

8. Every case has a critical structure. This is true for all cases. In the neck, the recurrent laryngeal nerve is the key structure, and you must find that prior to any division when doing a thyroidectomy. For the PD, the portal vein is the key structure, and you must know where this is at all times. For liver surgery, the vena cava is the key structure that you must not violate.

9. Have open instruments open and ready to go. Having the team fumble for open instruments when you must convert while bleeding is not the right time.

10. Try to convert prior to major bleeding. Think back to the case (and review video if you can record) to see the steps that occurred prior to bleeding. There is usually a series of warning signs before you encounter a major setback. Try to identify these so that you recognize this the next time you do this.

11. Be honest with your patients. It is hard to tell a patient that they are your first in any case. However, I have found that they appreciate this more than you will know. They will trust you more and they will want you to push the envelope, and they want to help.

12. Record every case on video if you can. This is the best way to see how your motions can be improved. It is amazing to see how jerky or rough you are at various points in the case as you review the video. It is an excellent teaching tool for trainees as they can review your way of doing things and be prepared for the case.

- MIS Pancreatic surgery:

- Any surgery on the pancreas is considered fraught with complications and most surgeons approach these cases with great trepidation. In general, the left pancreas is a more straightforward place to begin. The head of the pancreas is where several structures come together and the key element to this dissection revolves around the superior mesenteric vein (SMV) and portal vein (PV). This paper will only address resective surgeries of the left and right pancreas, understanding that there are many other MIS pancreatic procedures that can be performed in an MIS fashion.

- Distal pancreatectomy (DP):

- HPB surgeons have argued for decades about the issue of spleen preservation or not. It is my practice to NOT save the spleen and proceed with a standard DP with splenectomy. I have found spleen preservation to be an arduous task with little benefit in my experience. There is the possibility of delayed splenic vein thrombosis and gastric varices that can be a delayed issue. The risk of post splenectomy sepsis (PSS) is rare in my experience- I did have one patient who had a worse-than-expected illness with parainfluenza.

Indications:

MIS DP is performed for the following indications:

1. Mucin**ous cystic neoplasm:** usually younger females. These are NOT seen in males.
2. **Intraductal mucinous cystic neoplasm (IPMN).** Usually, a DP is performed for a side branch IPMN rather than main duct IPMN, the latter more commonly occurs in the head of the gland. This is one area where changing the indication for surgery MUST NOT happen. High risk and worrisome features, as outlined in the Fukuoka guidelines (ref 1) must be adhered to. In general, as associated main duct dilation and the eyes of an experienced HPB surgeon are the most critical elements to deciding whether to operate on these lesions.

3. **Chronic pancreatitis.** This patient population is tough to do in an MIS fashion. The usual indication is an area of focal pancreatitis in the tail of the gland, which is often associated with a splenic vein thrombosis and varices that can make an MIS approach tough.

4. **Acute pancreatitis.** The manifestation of acute pancreatitis that requires surgery is debridement, cyst gastrostomy or DP for a disconnected duct. The two former entities will not be addressed in this paper. DP for disconnected duct is a surgery that is treacherous. The splenic vein is usually occluded and the varices that result can be horrendous. This case is tough open, let alone MIS.

5. **Pancreatic adenocarcinoma (PDAC).** These cases were not handled in an MIS fashion in the early days of MIS surgery for fear of spread. We now know that this does not happen if the specimen is retrieved in a bag and elements of oncologic surgery are followed. Our practice is to offer those that are clearly resectable an MIS approach. However, those that are borderline and have received preoperative chemotherapy or radiotherapy are usually approached in an open fashion.

Technical considerations:

Laparoscopic:

Positioning:

The patient is best placed in “French Position”. This is achieved well with “leg splitters” where the legs are out in a straight fashion rather than in stirrups. However, both are acceptable. Some surgeons perform this operation with the patient supine. The ability to obtain reverse Trendelenburg will help your dissection tremendously.

Port placement:

Ports are placed with 5 mm ports in the midline, two right sides and a left mid clavicular 12 mm port for the stapler. I stand between the legs, hold the 30-degree camera, and have the trainee stand on the right side of the patient with a grasper and an energy tool, the Harmonic Scalpel is my preference.

Steps of the dissection:

- Begin by mobilizing the short gastric vessels to the level of the left crus. There is always a posterior short gastric that will hurt you. I will aim for the left crus and take this PRIOR to taking my last short gastric that is connecting to the spleen- this will allow the last short gastric to be lengthened and not tear the spleen.

- Secure the stomach out of the field – I use a KEITH needle and pass this through the abdominal wall and skewer the stomach and pass this stitch back through the abdominal wall.
- Stop and find the celiac axis. This will be marked by the LEFT GASTRIC ARTERY that will be heading straight to the ceiling. Know where this structure is always.
- Perform an intraoperative ultrasound at this point to see where the lesion is. Mark the anterior aspect of the pancreas with cautery to know your line of transection and be clear that you will be free of tumor.
- Incise the inferior border of the pancreas just to the patients' RIGHT of your transection mark. This will allow you access to the avascular plane between the pancreas and the retroperitoneum. Know that your ligament of Treitz is CLOSE. In the case of pancreatitis, the ligament of Treitz can be pulled into this plane and you can injure the proximal jejunum at this place. Also know where the middle colic artery runs. This can be dragged to the left of the patient and can cause bleeding.
- Clear a wide tunnel in this avascular plane until you come out superior to the splenic artery. One tip is that clearing up all the connections to the stomach cranial to the pancreas will allow this tunnel to be developed much easier. If there is an issue developing this, turn your attention to the superior border of the pancreas (be aware of the splenic artery- you should be cranial to it) and clean that up. Then go back down to your inferior tunnel.

- Lasso the pancreas with an umbilical tape that has been trimmed to length. The surgeon can grasp this and retract the pancreas towards the ceiling while the plane towards the spleen is developed as much as possible. I like to get as much of this dissection performed prior to pancreatic transection, as the ability to get traction and counter-traction is best with the pancreas intact. In case of bleeding, you are ready to staple across the whole gland.
- You can dissect the splenic artery out at the cranial aspect of the pancreas at this point. This is a place where a trainee can be taught to dissect out a key structure. If you have them work to the spleen side of your tape, the tape can be cinched up in the event of bleeding. IF you choose to dissect the artery out at this point, a ligature or a 35 lipped white load (vascular) stapler can be used to take the vessel.

- Pancreatic transection. I come across the whole gland with a stapler. I will use a green load on an Ethicon stapler, and we have been using a seam guard on the staple line. The key element here is SLOW closure of the stapler over a three-minute period. This will allow for the pancreas to give and not fracture under the stapler. We will leave the upper aspect of the pancreas out of our stapler path when we have not taken the artery separately (we will usually NOT dissect the artery separately). We will come across that last cranial aspect of the pancreas with a white (vascular) load on a stapler.

- Take the specimen off the adrenal and Gerota's fascia. It is sometimes necessary to take a divet of Gerota's or take the left adrenal – the latter obeying the posterior RAMPS plane (see ref 2). The decision of whether to stay anterior or posterior to the adrenal should be made PRIOR to surgery based on the imaging.
- Lastly, take the spleen off its attachments. One must be very careful not to enter the left chest as the diaphragm is quite thin in this area. Also, the splenic flexure of the colon is remarkably close to the inferior border of the pancreas and can be injured very easily.
- Extraction occurs via a bag and through the 12 mmm port site that we extend. I do not morcellate the spleen in these cases. In fact, this results in a larger extraction site than for a PD. A drain will be left at the pancreas transection point.

Robotic:

The positioning is with a foot board and the patient in a reverse Trendelenburg of 30 degrees. This will facilitate the dissection tremendously. My practice is to always have two right hands and so I place the camera in the supraumbilical position, 8mm trocars in the left mid clavicular and mid-axillary line.

- Another 8 mm trocar is placed in the right mid-clavicular line and an 5mm “air seal” CO2 insufflator is placed in the right mid- axillary line. The steps of the dissection are identical to the lap approach outlined above.

Post operative care:

The patient will not have a nasogastric tube but will have a foley catheter that we will remove on post operative day (POD) 1. We will start a clear liquid diet and check the drain for amylase. We will start prophylactic anticoagulation and begin ambulation.

On POD 2, the patient will be advanced to a full liquid diet, and we will transition to oral pain medication. They will be expected to shower and ambulate. On POD 3 we will check another drain amylase and if this is elevated, we will leave the drain in place. In general, we will aim for POD discharge if the patient is able.

Summary:

MIS DP is a good place to start on your pancreatic MIS practice. The operation can be performed in a purely stapled fashion making it a good place to begin a HPB MIS practice. The major risk is bleeding from the splenic artery or vein, and these can be managed safely with the measures outlined.

Pancreaticoduodenectomy (PD):

The PD has been the golden grail of not only open pancreatic surgery, but MIS surgery in general. The association of the head of the pancreas to several key structures, including the PV, SMV and vena cava, makes this operation a major undertaking. Despite there being data that one can start the PD surgery by learning the MIS technique, it is my opinion that knowing the open surgery completely will help the transition to MIS PD. My own experience was that I had performed approximately 2000 PD prior to embarking on the robotic PD. MY own lack of skill in laparoscopic suturing makes the robot my preferred platform for this surgery.

Indications:

MIS PD is usually performed for the following indications:

1. Periampullary tumors: usually malignancies of the pancreas (pancreatic ductal adenocarcinoma – PDAC), duodenal cancers, ampullary cancers, and distal bile duct cancers are the most common reason to perform a PD. These patients will often be borderline resectable, in which case they may need neoadjuvant therapy (NAT). We will usually perform the post- NAT PD in an open fashion if there is concern for vascular involvement.

2. IPMN – as with the DP, most surgery for IPMN are for main duct IPMN or mixed-type IPMN. The indications for surgery have become more stringent with time and so the indication will often be based on duct size and presence of jaundice.

3. Duodenal adenoma- this is an indication for surgery and the choice between trans-duodenal resection or PD is dependent on how much of the circumference of the duodenum is involved with tumor. Our data suggests that the recurrence rate after trans duodenal resection is approximately 30%.

4. Chronic pancreatitis (CP)- these surgeries can be tougher than PD for malignant disease. It is rare that we feel that an MIS approach is possible in this patient population.

Technical considerations:

Patient positioning:

The patient is placed with a footboard and will be in 25 degree reverse Trendelenburg.

Port placement:

Direct entry is used to enter the abdomen with a 5 mm trocar. Again, we aim for two right hands, and so we place two 8 mm robotic trocars in the left mid-axillary and mid-clavicular lines. The camera 8 mm port with be placed in the right mid-clavicular line and another 8 mm trocar will be placed in the right mid-axillary line. The midline port will be upsized to a 10 mm “air seal” trocar and will be where the bedside assist will work.

Steps of the dissection:

This is one surgery where the open and MIS approaches are very different. The MIS approach involves a MEDIAL approach with the lateral dissection occurring last.

a. Laparoscopic takedown of the gastrocolic ligament- this will allow for the proximal jejunum, distal to the ligament of Treitz, to be identified and tacked to the posterior wall of the stomach. This allows for the surgeon to not have to go beneath the transverse colon mesentery for the rest of the case. This helps tremendously in the robotic platform, where staying in one quadrant of the abdomen can be most efficient.

b. The robot is docked, and the Kocher is performed- this is the next step where a wide Kocher is performed. Dropping the hepatic flexure of the colon will aid in this dissection to get wide dissection of the duodenum off the vena cava. The aim is to get to the ligament of Treitz eventually from the Right side of the patient.

c. Follow the Right gastroepiploic vein to find the SMV- this is the easiest way to \find the SMV. If there is an issue with this measure, then trace the middle colic vein to the gastrocolic trunk to the SMV.

d. Create the tunnel under the neck of the pancreas- this can be best performed by increasing the inferior border of the pancreas dissection, such that you are not working in a hole.

e. Transect the stomach- we usually perform a standard PD and so we take the gastroepiploic vessels on the greater curvature and the lesser curvature vessels. We usually use energy for this dissection. We then staple across the antrum.

f. Dissect the superior pancreatic node to find the hepatic artery- the best way to find the hepatic artery is to find the superior pancreatic node. The artery will be directly under this. If there is completely replaced anatomy, there will be no artery in this usual spot.

g. Find the gastroduodenal artery (GDA)- this can be ligated or clipped- we will usually use hemolock clips for this vessel.

h. The PV will be right beneath the hepatic artery. The tunnel can be completed from the SMV side. Alternatively, it is perfectly reasonable to divide the pancreas sequentially without gaining the full tunnel. This has been a major change in our practice as we would be very fixated on gaining a complete tunnel. It is NOT necessary to do this. However, a tear in the PV can be a problem if you do not have complete transection, so one should be certain that the vein is free anteriorly to perform a sequential transection.

i. Tease the right side of the SMV- using suction, the right side of the confluence of the SMV and PV can be freed easily.

j. Complete the Kocher to the ligament of Treitz and prolapse the proximal jejunum into the right supracolic compartment. The proximal jejunum can be stapled from this position.

k. Take the mesentery of the proximal jejunum and duodenum as far as you can. Energy can be used for this and the more you can do to dissect the duodenum off the head of the pancreas, the better.

l. Take the lateral common bile duct node and ligate and transect the bile duct- controlling the bile duct in some way will prevent bile from spilling onto the field throughout the case.

m. Finally take the uncinate off the SMA- rotating the specific anteriorly will allow for a posterior SMA- first dissection that can be helpful in taking the anterior attachments. The specimen is placed in a bag and left in the left upper quadrant during the reconstruction.

n. Bring the transected jejunum through to the right supracolic compartment- and begin reconstruction using a standard Blumgart technique. The reconstruction is as outlined in ref 3. We use 2-0 silk on a MH needle and 5-0 Monocryl for a stented duct-to-mucosal anastomosis.

o. The hepaticojejunostomy is then performed. Many use a v-lock suture here, but we have found a higher rate of stricture. We have moved to a 5-0 Monocryl suture in this as a running stitch.

p. Lastly, perform the gastrojejunostomy- this is performed using a bedside stapler and by oversewing the enterotomy with a 2-0 v-lock suture.

q. Wrap the pancreatojejunostomy with a falciform flap- if easy. One can disrupt the anastomosis with the move, and this must be taken with care.

r. Place a drain and extract the specimen through the midline port.

Post operative care:

The patient is left with a foley catheter but NO nasogastric tube. We will begin a clear liquid diet on POD1 and will check drain amylases on day 1,3 and 5. The removal of the drain will be based on low amylase at all times and will be taken out when the patient is on a regular diet. We will advance the diet fairly aggressively and try to get off all intravenous medications and fluids by POD 3. The drain is left in place if there is any concern for pancreatic leak.

Summary:

The robotic PD is a tour de force and must be taken on with great care of support. The surgery itself is somewhat backward to the usual open PD.

References:

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2. Singel institution results of radical antegrade modular pancreatosplenectomy for adenocarcinoma of the pancreas in 78 patients: Grossman, J, Fields, R, Harwkisn, W et al. J Hepatobiliary Pancreat Sci. 2016 Jul;23(7):432-41
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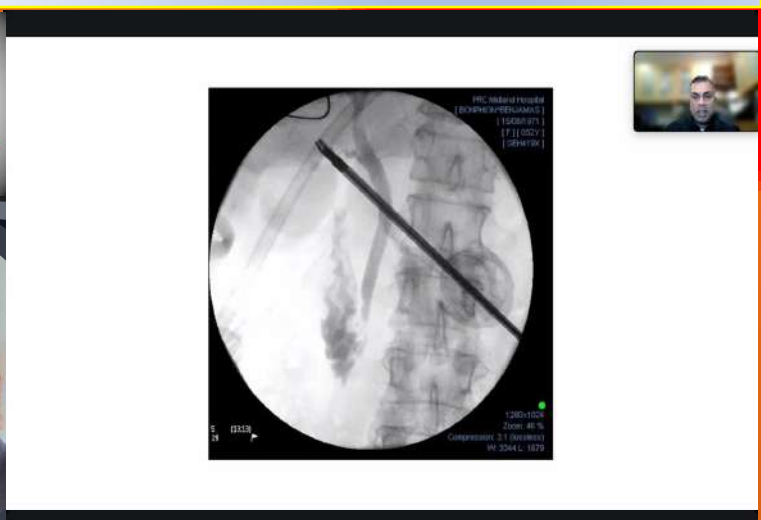
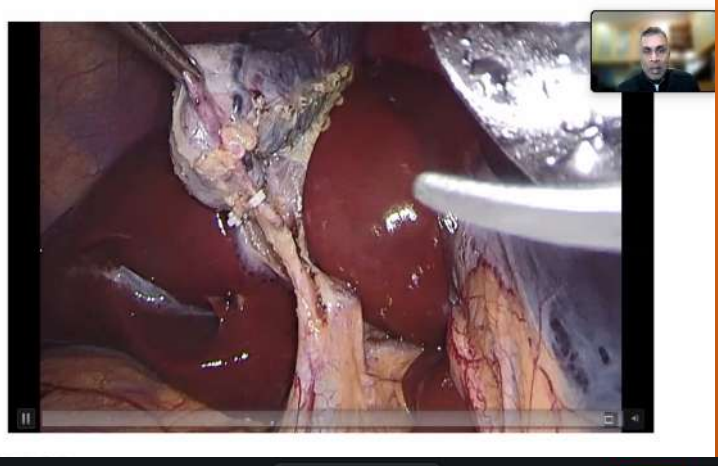
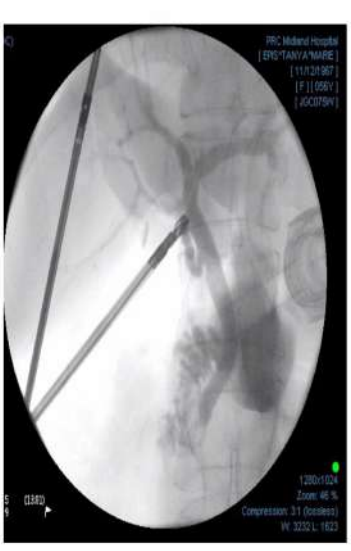
Recently held CME activities

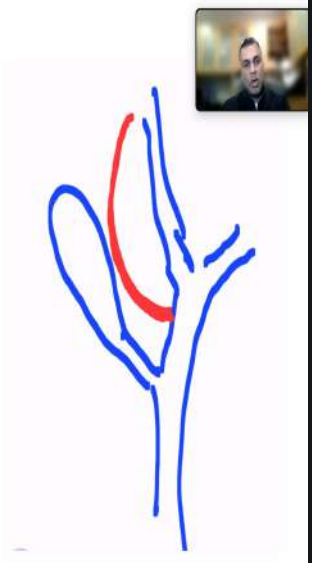
1. Webinar –

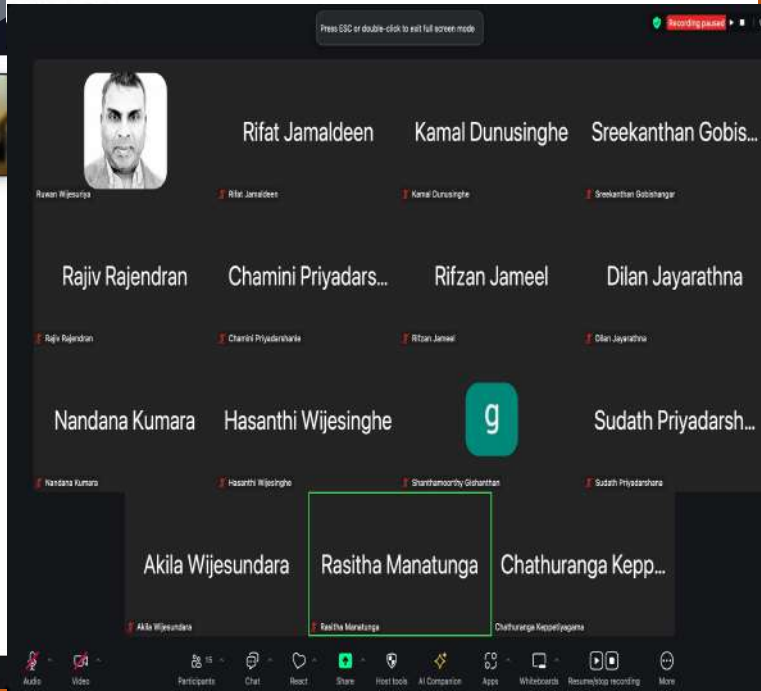
Intra Operative Cholangiogram
A/Prof Ruwan Wijesuriya
MBBS MRCS FRACS
University of Notre Dame Medical School, Western Australia





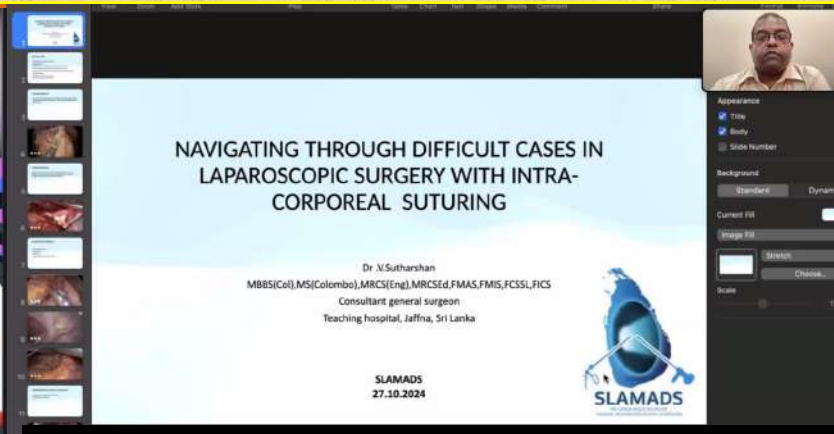


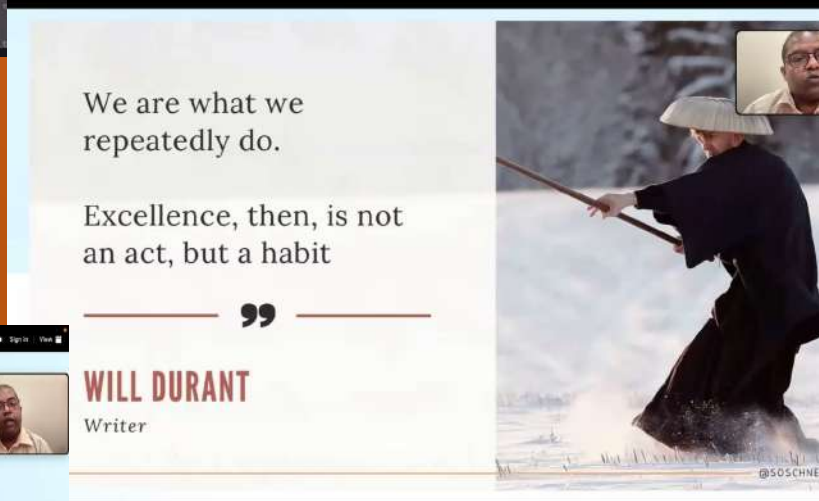


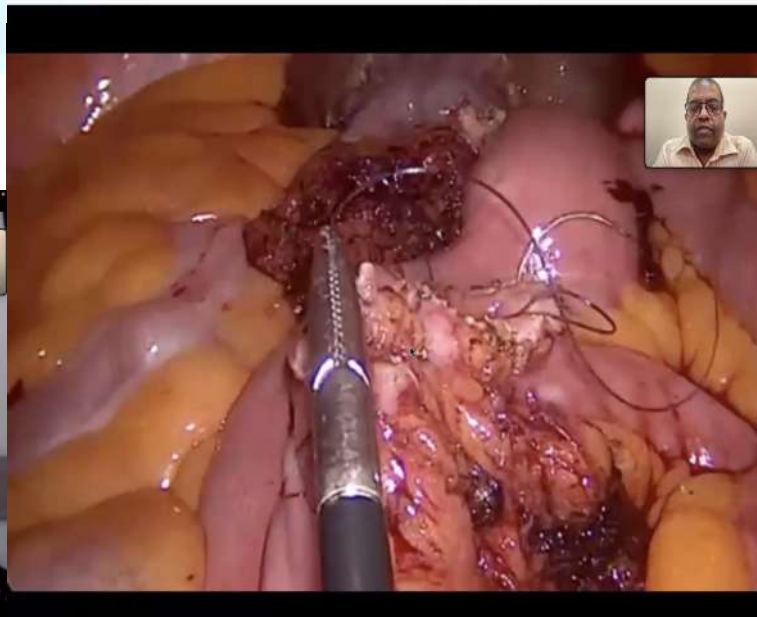


2. Webinar –
Navigating through difficult cases in laparascopic Surgery with intracorporeal suturing

Dr V Sutharshan
MBBS MS MRCS FICS FCSSL FMAS
Consultant Surgeon
Teaching Hospital Jaffna







SLAMADS
at
the Sri Lanka Surgical Congress 2024: Pioneering the Future of Minimal Access and Digital Surgery

SLAMADS at the Sri Lanka Surgical Congress 2024: A Landmark Event in Surgical Innovation

The **Sri Lanka Association of Minimal Access and Digital Surgeons (SLAMADS)** made a remarkable impact at the **Sri Lanka Surgical Congress 2024**, where groundbreaking advancements in **minimal access** and **digital surgery** took center stage.

Key Highlights from the Event:

- **Cutting-edge Digital Surgery Demonstrations** showcasing the latest in surgical technology
- **Expert-led Workshops & Lectures**, where leading surgeons shared their insights on the future of surgery
- **Collaborative Networking** that brought together top minds from the world of medicine, technology, and innovation

The event was a milestone for **SLAMADS** and its ongoing efforts to transform surgical practices through innovation, precision, and digital integration.

The **Sri Lanka Association of Minimal Access and Digital Surgeons (SLAMADS)** kicked off the **Sri Lanka Surgical Congress 2024** with a powerful opening symposium on **'Scalpel vs Scope'.** The topics covered were:

- Gastrooesophageal reflux disease
  Dr Anoj Dharmawardhane(AUS) vs Dr Rasika Bulathsinghala(SL)
- Management of Biliary Obstruction
  Mr. N. Venkatesh Jayanthi(UK) vs Dr Nilesh Fernandopullie(SL)
- Chronic Pancreatitis
  Dr Duminda Subasinghe(SL) vs Dr Nandana Dinamithra(SL)

Symposium Highlights:

•**'Scalpel vs Scope'**: A deep dive into the evolving debate between traditional surgical methods and the rise of minimally invasive, digital surgery.

Following the opening symposium, the congress explored several thought-provoking topics, including:

•**The Role of Digital Surgery in Modern Healthcare**
•**Advancements in Robotic-Assisted Surgery**
•**Training the Next Generation: Bridging the Gap Between Technology and Tradition**
•**Minimally Invasive Surgery: Benefits, Challenges, and Future Prospects**

✨ **Thank you to all the speakers, participants, and attendees who made the event a tremendous success. SLAMADS continues to lead the charge in revolutionizing surgical practices through innovation and collaboration.**

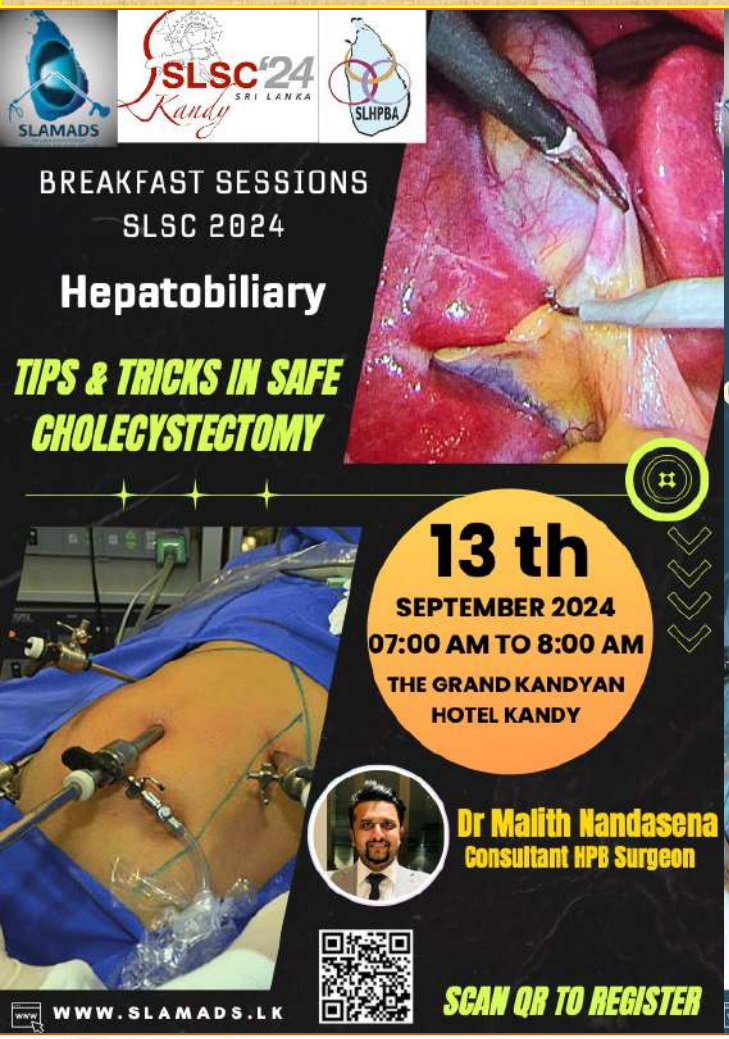
Stay tuned for more updates on how **SLAMADS** is shaping the future of surgery with cutting-edge technology and expertise.

1. Pre-congress Workshop – Troubleshooting in Oesophageal Surgery

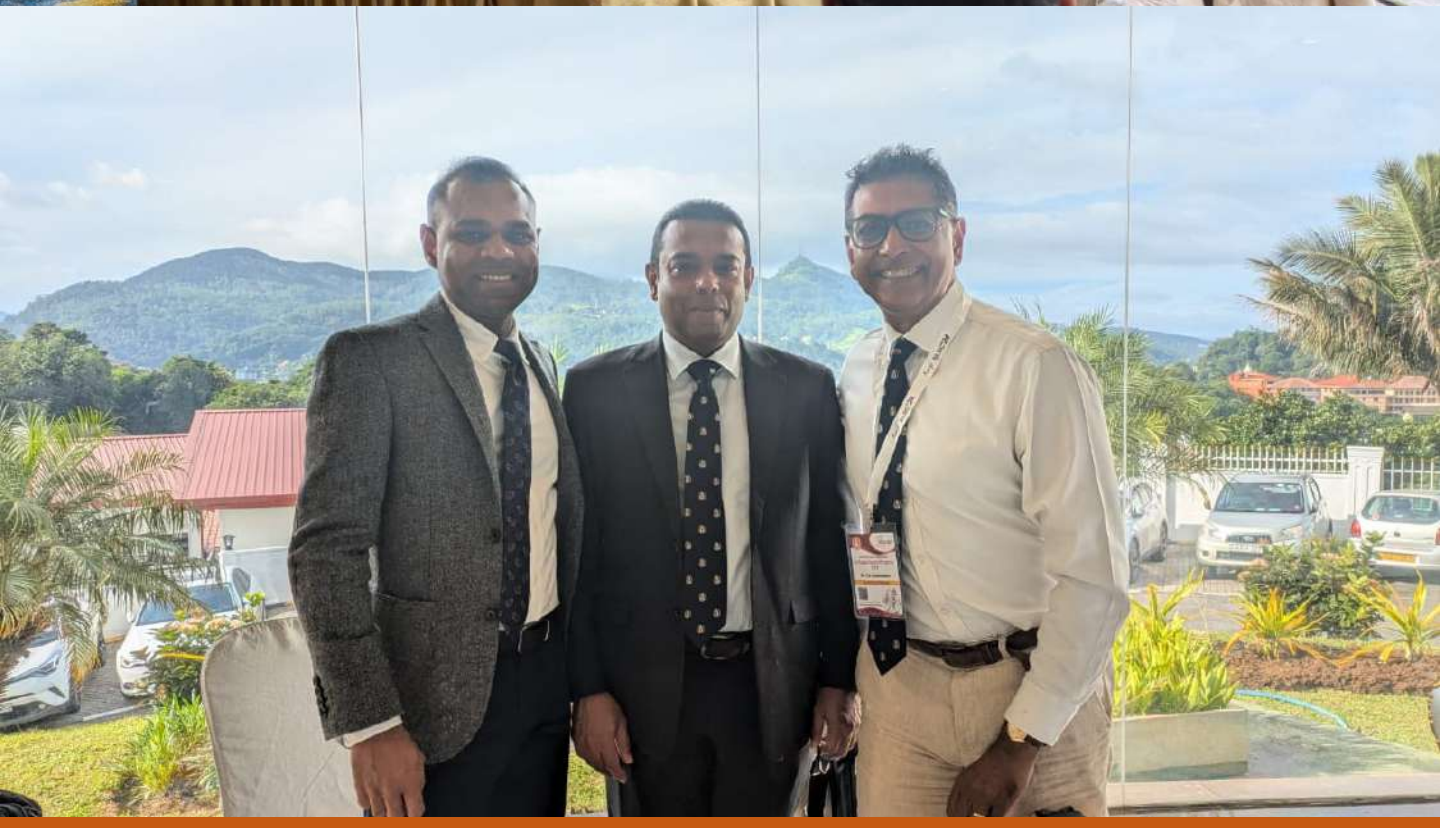
2. PreCongress Workshop – Baraiatric Surgery

3. PreCongress Workshop–
Enhancing Surgical Performance

4. ‘Meet the Expert’ Sessions




Definition



Digital Tele mentoring for Surgical Training Takes Flight in Sri Lanka

On October 7, 2024, the College of Surgeons of Sri Lanka Auditorium played host to a momentous event aimed at advancing surgical training and collaboration across borders. The *Kick-Off Event* for the *Digital Tele-mentoring for Surgical Training* project, supported by Rods & Cones in partnership with the Jaffna Teaching Hospital, the Department of Surgery at Sri Jayawardenapura University, and Colombo South Teaching Hospital, marked the beginning of an innovative initiative that promises to transform surgical education and practice in Sri Lanka.

The theme of the event—**"See More. Do More. Teach More."**—underscores the project's focus on using cutting-edge technology to enhance surgical capabilities through simple, secure, and remote access for surgical collaboration.

This pioneering initiative leverages advanced smart surgery glasses and a digital remote assistance platform, enabling real-time connections between surgeons, medical professionals, and experts across the globe. The goal is to provide enhanced mentorship and collaborative opportunities, allowing surgeons in Sri Lanka to gain valuable insights and support from specialists worldwide.

Event Highlights:

The event featured a comprehensive agenda, beginning with an **Opening Address** by Prof. Tan Arulampalam, who highlighted the potential of digital telementoring to improve surgical outcomes and foster a culture of continuous learning. This was followed by an insightful **Keynote Presentation** by Bruno Dheedene, CEO of Rods & Cones, who introduced the vision behind the digital platform and its transformative impact on global surgical training.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A detailed **Demonstration Project Overview and Use Cases** was presented by Yohan Silva and Prof. Tan Arulampalam, showcasing the practical applications of the technology in real-world surgical settings. The live demonstration highlighted how surgeons in Sri Lanka can leverage this platform to enhance their skills and access expert guidance, regardless of geographic location.

One of the event's standout moments was the **Live Surgery Demonstration from the Netherlands** by Prof. Richard Van Hillegersberg. This demonstration provided a first-hand look at how the remote surgical collaboration platform operates in real - time, allowing Sri Lankan surgeons to engage with a live procedure and receive expert feedback.

The event concluded with **Closing Remarks** by Prof. Bawantha Gamage, who emphasized the importance of global collaboration in advancing healthcare and underscored the potential for this project to set new standards in surgical education and training.

A New Era for Surgical Education

The Digital Tele-mentoring for Surgical Training project marks a significant milestone for Sri Lanka's healthcare community. By bridging geographic and resource gaps, this initiative has the potential to elevate surgical training to new heights, enhancing skills, expanding knowledge, and ultimately improving patient outcomes.

With continued support from Rods & Cones, the Jaffna Teaching Hospital, Sri Jayawardenapura University, and Colombo South Teaching Hospital, the project is set to roll out further training programs and surgical collaborations, positioning Sri Lanka as a leader in digital healthcare innovation.

Stay tuned for more updates as this exciting journey unfolds!

Minimal Access Surgical Training Fund (MASTraF)

- SLAMADS started MASTraF with the objective of funding its members to get themselves further trained in MAS in overseas centers of excellence.
- This is the first time in Sri Lanka such initiative is taken to support Minimal Access Surgical Training. Once the fund is adequately built, we will advertise to our membership to apply for sponsorship for their respective training programmes. We will publish the eligibility criteria for applicants.
- SLAMADS request all the readers of this news letter to support us to develop this fund by individual contributions or through well-wishers.
- Thank you for your invaluable support to develop MAS in Sri Lanka.

Title: Laparoscopic Left Adrenalectomy for a Left adrenal tumour in a Patient on follow-up for Medullary Thyroid Carcinoma (MTC), a rare case of MEN 2A syndrome.

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2 – Consultant Endocrinologist, District General Hospital, Nuwaraeliya.
3 – Consultant Oncologist, District General Hospital, Nuwaraeliya.
4 – Consultant Anaesthetist, District General Hospital, Nuwaraeliya.

Introduction:

Multiple Endocrine Neoplasia (MEN 2A) is a rare genetic disorder affecting about 1 in 25,000 to 1 in 40,000 people. This rare syndrome is caused by activating point mutations in RET protooncogene on chromosome 10 (1). MEN 2A should be suspected when patients present with specific endocrine tumours including medullary thyroid tumours, parathyroid tumours or adrenal pheochromocytomas (2).

Here we present a case of a patient with a history of MTC who, during routine follow-up, was found to have a left adrenal tumour. Subsequent laparoscopic left adrenalectomy and histology confirmed it to be a pheochromocytoma confirming MEN 2A syndrome.

Case Presentation:

A 43-year-old female patient who had a low-grade medullary thyroid cancer treated surgically in September 2023 was followed up at the endocrinology clinic and District general hospital, Nuwaraeliya. On initial screening she had normal serum calcium levels and normal urinary metanephrines. Post operative 3-month follow-up assessment showed elevated serum calcitonin levels (210pg/ml) and normal ultrasound scan of the neck, which prompted a CECT (Contrast Enhanced Computed Tomography) Abdomen and pelvis.

CECT showed a left adrenal tumour measuring 34mm x 28mm x 27mm and showed few small sub centimetre enhancing nodules in the liver involving segment IVA and VII which were difficult to characterize. Multidisciplinary discussion suggested the adrenal mass to be a non-functioning pheochromocytoma or adrenal metastasis from the known MTC. Liver lesions were also suggested to be Metastatic nodules from the known MTC with elevated calcitonin levels. A decision was made to go ahead with the left adrenalectomy to assess the left adrenal tumour.

The patient underwent a laparoscopic left adrenalectomy. Even though this was clinically non-functional, anaesthetic team was prepared to manage a hypertensive crisis. She was operated on 60 60-degree right lateral position. NG tube decompression of the stomach was done. Ports were placed as shown in the diagram 1. The peritoneum was entered using a supraumbilical 10mm open Hassen port. Two working ports included one 5mm epigastric port and a 10mm Left hypochondrial port. Further one 5mm retraction port was employed and was located at the left anterior axillary line at the level of the umbilicus.

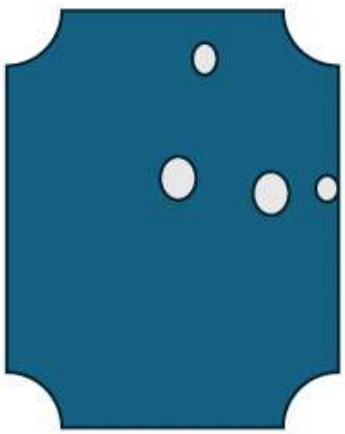

Diagram 1 showing Port positioning. Small circles show 5mm ports and larger circles show 10mm ports.

Peritoneal survey did not reveal any visible peritoneal or liver lesions. Dissection started with mobilization of the descending colon along the white line of told. Gastrocolic omentum at the distal transverse colon divided and lessor sac entered. Splenic flexure was moxbilized. Phrenicocolic and splenocolic attachments were divided using blunt and sharp dissection to free the splenic flexure and its mesentery from retroperitoneal organs. Tail of the pancreas exposed, and splenic flexure was swept away using blunt dissection. Superior pole of the left kidney, pancreatic tail and left renal vein was exposed. Left adrenal vein was exposed and dissected preparing it for clipping. Mobilization of the adrenal gland and tumour was avoided prior to clipping of the left adrenal vein. Left adrenal vein was double clipped and divided. Image 1 shows the left adrenal vein before, and Image 2 shows the Left adrenal vein after division.

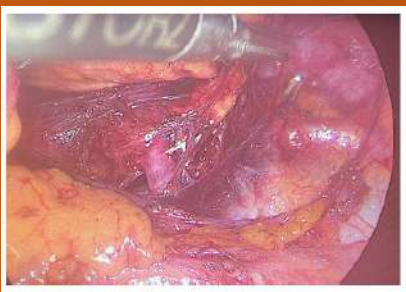

Image 1 showing the exposure of the left adrenal vein.

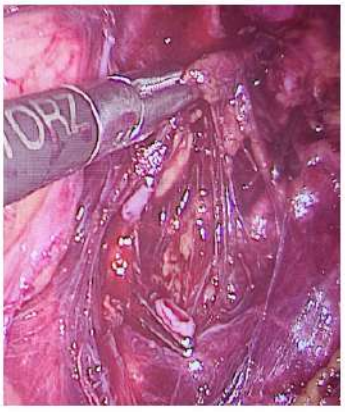

Image 2 showing the left adrenal vein been clipped.

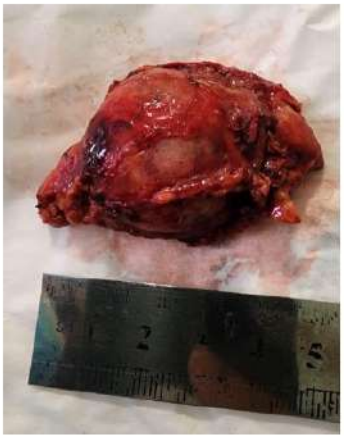

Image 3 showing the final specimen and its dimensions.

Left adrenal gland and the tumour was mobilized taking down its adhesions to the adjacent tissues. Tumour was retrieved in a bag using the 10mm left hypochondrial port site. Post operative period was uneventful. Patient was on full oral diet on post operative day 1 and was discharged home on post operative day 2. Histology report showed the tumour to be a pheochromocytoma with a diameter of 2cm. There was no capsular invasion or any significant mitotic activity seen in the tumour. Patient is planned to be followed up regarding the liver lesions.

Discussion:

Multiple endocrine neoplasia type 2A (MEN 2A) is a rare autosomal dominant disorder characterized by the presence of medullary thyroid carcinoma (MTC), pheochromocytoma, and primary hyperparathyroidism. MTC is the most common manifestation of MEN 2A, occurring in almost all patients, followed by pheochromocytoma (50%) and primary hyperparathyroidism (10-20%) (2). Pheochromocytomas in MEN 2A are typically bilateral and benign, arising from the adrenal medulla (3). The diagnosis of pheochromocytoma is based on biochemical evidence of catecholamine excess, such as elevated plasma metanephrines or urinary catecholamines, and radiological imaging, such as computed tomography (CT) or magnetic resonance imaging (MRI) (2).

In this case, the patient presented with MTC and was subsequently found to have a left adrenal tumour during routine follow-up. The diagnosis of pheochromocytoma was confirmed on histopathology after laparoscopic left adrenalectomy.

This case highlights the importance of long-term surveillance for pheochromocytoma in patients with MTC, even in those with no clinical symptoms or signs of catecholamine excess.

The optimal timing of adrenalectomy in MEN 2A patients with pheochromocytoma is controversial. Some experts recommend prophylactic bilateral adrenalectomy at the time of thyroidectomy, while others advocate for a more conservative approach, reserving surgery for symptomatic or functional tumours (4).

The choice of laparoscopic approach depends on several factors, including the size and location of the adrenal tumour, the patient's body habitus, and the surgeon's experience and preference (5–8).

In this case, the patient underwent a laparoscopic left adrenalectomy via the lateral transperitoneal approach with no significant intraoperative or postoperative complications. Retroperitoneal approach to the adrenal gland can be employed by experienced operators. It could be useful specially when past surgeries and adhesions hinder laparoscopic approach.

Conclusion:

Laparoscopic adrenalectomy has become the preferred surgical approach for adrenal tumours, including pheochromocytomas. It offers several advantages over open surgery, including reduced postoperative pain, shorter hospital stays, and improved cosmesis. With advances in laparoscopic instruments and increasing experience in laparoscopic surgery has made this a safe and standard procedure.

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KSERS International training program (ITP)

KSERS 2025 International Training Program for SLAMADS Members

Inbox

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to slamads2020, me

Request for Distribution: KSERS 2025 International Training Program for SLAMADS Members

Dear President of SLAMADS

Warmest greetings from the Korean Society of Endo-Laparoscopic & Robotic Surgery (KSERS).

We are pleased to inform you that KSERS is offering a **1-month International Observership Program** for candidates from around the world.

We kindly request your assistance in distributing and promoting the attached information regarding this program to the members of SLAMADS. We believe this initiative will provide significant benefits to young surgeons.

We will select an institution according to the candidate's preference, contact the chairman of the institution and provide financial support. (The amount of the scholarship is 2,000,000 Korean won.)

To apply for this program, please send the below documents to the KSERS secretariat (info@ksers.org) by **January 31, 2025**.

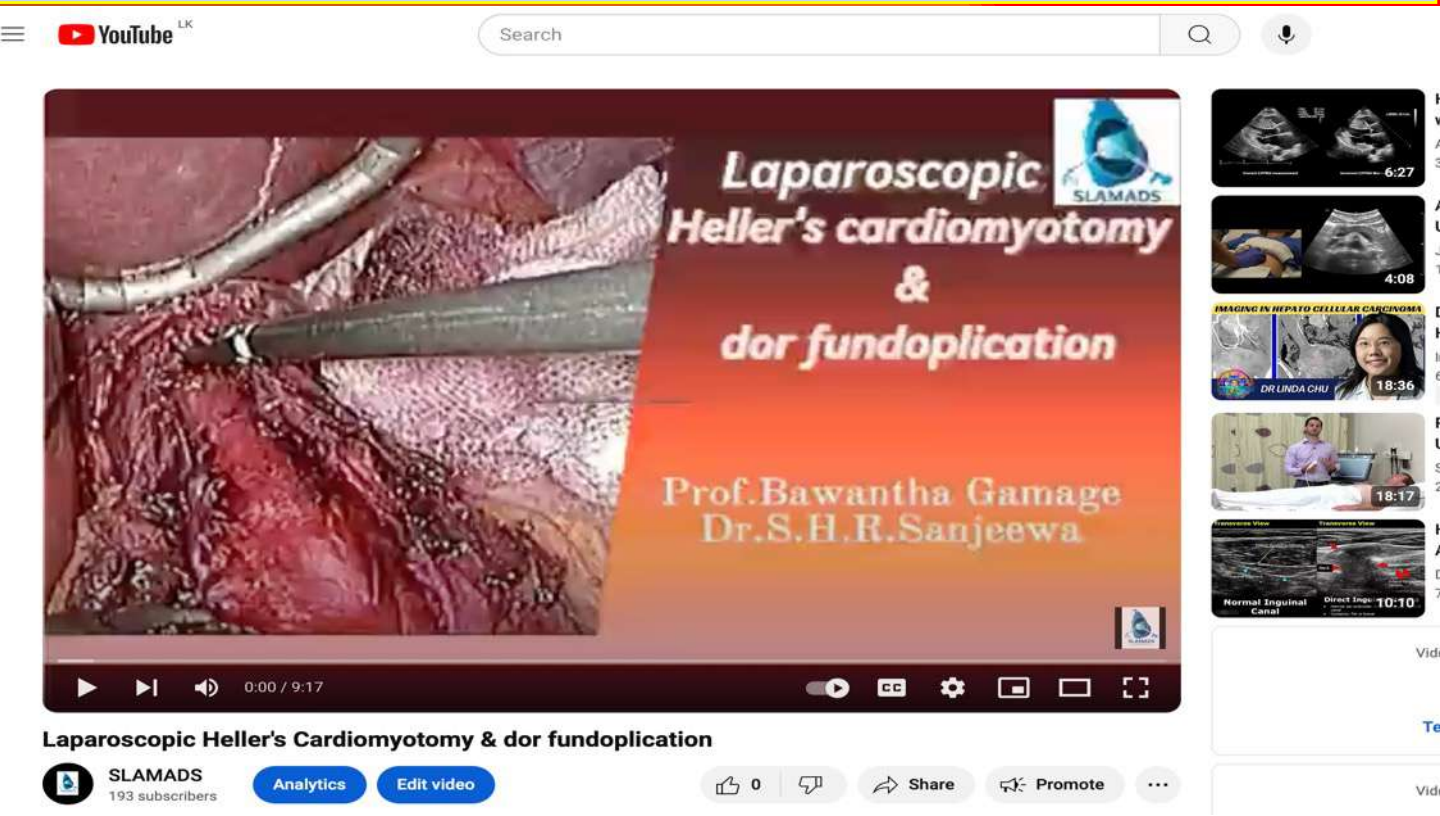
- Application Form
- A Copy of Curriculum Vitae
- A Letter of Recommendation
- A Copy of Passport
- Title Page of the Published Paper in JMIS (if applicable)

Latest at Video Gallery

Laparascopic Heller's Cardiomyotomy & dor Fundoplication

Prof Bawantha Gamage

Dr S H R Sanjeewa



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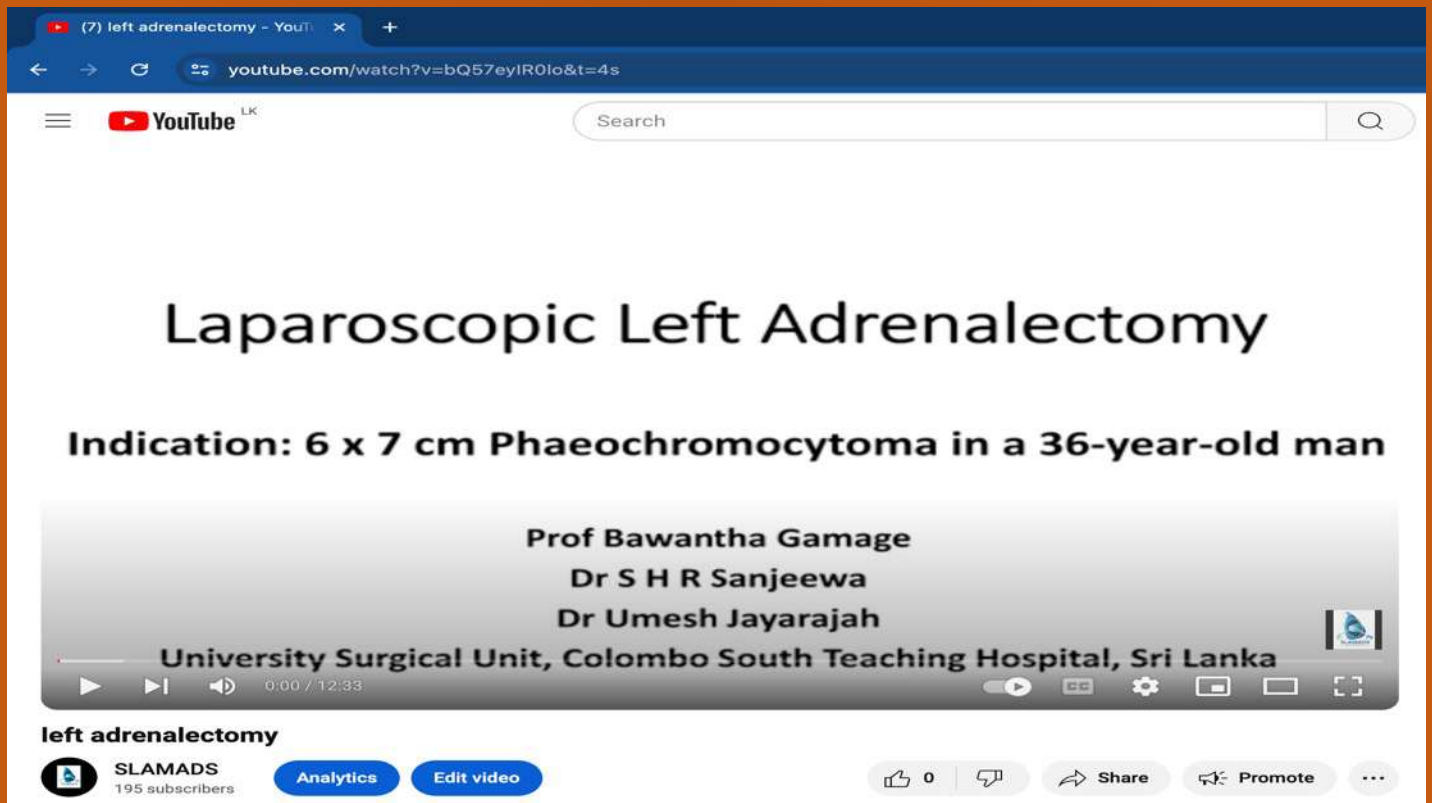
Latest at Video Gallery

Top Honors for Laparoscopic Mastery at AMASICLICK 2024

Prof. Bawantha Gamage's video on laparoscopic adrenalectomy has clinched the top prize at AMASICLICK ,an international competition for best laparoscopic videos, during the 19th AMASICON 2024 in the “Other Category”. The winning video earned a cash award of ₹25,000 for its outstanding demonstration of advanced surgical techniques.

The video was on Laparoscopic Adrenelectomy as is available at our website. https://slamads.lk/video_library

SLAMADS congratulates the team and encourages members of SLAMADS to participate in subsequent competition as well send there work to SLAMADS.



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