



## MESSAGE FROM THE PRESIDENT



Welcome to our third issue of the MSGH Bulletin. Our flagship Annual Scientific Meeting, Gut 2022, will be held from 19<sup>th</sup> to 21<sup>st</sup> August 2022 at the KL Convention Centre. As the Organising Chair and Co-Scientific Chair, I welcome you in physical attendance to our exciting scientific programme. I need to take this opportunity to thank my committee members for their contributions in ensuring the success of the meeting, to our sponsors for their support and, of course, our members for their fellowship.

Just to give a glimpse of what we have in store during GUT 2022. We will be honouring the greatest minds in our field at two lectureships; they are Professor Govind Makharia, New Delhi, for the MSGH Oration and Professor Dr Justin Wu Che-Yuen, Hong Kong, for the Panir Chelvam Memorial Lecture. This year, the total submitted abstracts have surpassed 120 (five year average is 70) and an impressive number of 40 exhibition booths. During the opening ceremony on 19<sup>th</sup> August, we will be launching our newly revamped Society website, a project we have been working for months to bring a more enhanced experience for our members. There is also the virtual run to celebrate the World Digestive Health Day 2022. There are many more

and do stay tune on our announcement at the website and social media.

Organising a world-class meeting is not easy, and it takes months of preparations, and requires enormous dedication and sacrifices. Personally I have learnt a lot being the Scientific Chair of APDW 2021 and also of several past GUT meetings. There were many stories to tell, tears to shed, and also happy moments. There were regrets, frustrations, and tolls on personal and family life. I have produced less papers, spent less time with my research fellows and got less grants during the period preparing for APDW 2021. I believe I need to share this, not to take credit, but I hope our members would appreciate the efforts and be proud of what we have achieved together.

If you feel we did well, please share your thoughts on social media (#MSGH #GUT2022) and or write to me personally (my email: yylee@usm.my). Likewise, if we could have done better, do email me.

**Professor Dr Lee Yeong Yeh**

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Greetings!

We are in the 2<sup>nd</sup> half of 2022 and the ongoing pandemic continues to dominate our attention and resources. COVID-19 patient admission stays on the rise in

government hospitals. It's not the time to let our guards down just yet.

Having said that, it's certainly exciting to see the medical fraternity back on its feet despite the new challenges of work and daily life. It's wonderful to see that many conferences are held physically to meet everyone face-to-face and we hope this trend can and will continue for as long as possible.

In this bulletin, we have articles from two of our leading hepatologists in the country who wrote about visions of improvement and the way forward in the field of hepatology. There is also an article from a fellow with his overseas training stint and a snapshot of what happened during ENDOSCOPY 2022. We thank all the contributors for their piece and we are certain that they will add tremendous value to our bulletin.

Finally, we are hopeful and we look forward to many more exciting developments ahead. After a great meeting in ENDOSCOPY 2022 in UMMC recently, we are looking forward to meet everyone in GUT 2022.

Take care and God bless.

**Dr Nik Razima Wan Ibrahim**

## A Fellow's Journey

by Dr Glenn George Kolet

### *"Buongiorno Prof!"*

"Buongiorno Prof," "Buongiorno Prof," the morning wishes fill Room 4 of the Endoscopy Suite of as a stout, sturdy figure swiftly enters the room and responds "Buongiorno Ragazzi". He proceeds to hang his lab coat on the wall while behind him, a fresh set of size seven gloves lay open, and an assistant holds a splashproof gown out as he turns around with outstretched arms and slips into it.

A large LST in the transverse colon awaits this master's hands. As he carefully examines it and plans his next steps, we wait for the right moment to interrupt his train of thought, asking for his choice of knife for the morning's dissection. Coolly and calmly, he replies in a low Sicilian drawl, "Anything you want."

Seven to eight pairs of eyes (visitors from all over Europe and the Middle East) intently look on as he precisely engages the submucosal plane and like a master artisan, turns his shoulders, arms, and waist while carefully letting go of the scope and controlling it only by the wheels to extend his incision.

He leans over and with a raised eyebrow, looks me dead in the eye and says, "Scope control is everything." From the months that preceded and the months that were to follow, I would learn the finer details of this art form from one of the best endoscopists of our generation, Alessandro Repici, or as we address him, Prof.

Early on, I understood that he demanded an extremely high level of commitment to the craft. His expectation of how elegantly an upper endoscopic examination, let alone a Zenker's septotomy should be performed had to become my new expectation, and this was very high. His unrelenting drive for academic excellence and his "never-give-up" attitude are the shoulders on which the star-studded faculty of Humanitas stand on and found their identity.

I had the privilege of closely learning from them all: Silvia Carrara, an endosonographer with a superhuman capacity to understand and explain EUS anatomy in 3D; Professor Dr Cesare Hassan, a genuinely brilliant mind with hundreds of publications to his name, quirky but daring enough to ask the questions no one considers, yet when approached, humble enough to share his knowledge regardless of hierarchy and age difference; Roberta Maselli, the woman who laid down the tenets of my POEM training and to whom I owe so much to; and last but not the least, Alessandro Fugazza, an



Humanitas Research Hospital, Italy

extremely talented, young but confident endoscopist who took on the baton passed down to him from Andrea Anderloni and made it his mission to ensure I was well-versed in everything HOT-AXIOS/EC-LAMS and ERCP related.



*Dr Glenn Koleth (left) with Professor Dr Alessandro Repici and fellow colleague, Dr James Emmanuel*

During my time at Humanitas Research Hospital, the team was generous at everything from procedures, case translations, research collaborations, databases, holiday destinations, and aperitivo spots. Over the last year, I was privileged to pilot a cadaveric resection course, organise another (thanks to Professor Dr Repici and Roberta) participate in another live porcine model training course (thanks to GITAP society) and have had multiple opportunities to network with international faculty while helping to organise multiple Endoscopy on Air's, the brainchild of Alessandro Repici and Thomas Roesch. I was also privy to the inner workings of the Italian Colorectal Screening Program and how it came to be one of the most robust and successfully organised screening programs for all of the Europe to follow, courtesy of Professor Dr Hassan.

Every day of my overseas fellowship posed a unique and memorable learning challenge, spurring me to be as ambitious and hard-working as my Italian counterparts. I am so humbled to have learned so much from such a confident, elegant, and passionate group. My palate for research has dramatically expanded over the year. I now understand its immense value on an international playing field.

Aside from work, I have had some weekends free to explore the great cities of Italy, such as Rome and Naples, to name a few. This center is not without its challenges; however, the team's outlook and approach in the face of adversity have taught me how having the



*With colleagues at work*

right mix of grit and grace, along with a supportive leader who bestows trust, can see any mountain conquered.



*Performing POEM under direct supervision of Professor Dr Repici*



*Enjoying a night out with friends at Duomo*

Overall, I am incredibly honored and thankful to God to have had this dream of an overseas fellowship divinely orchestrated through Datuk Dr Ryan Ponnudurai, a long-time friend and contemporary of Prof. Repici. He is as passionate about fellows' welfare, training, and academic development as the Italians are about their local football clubs. To conclude, Humanitas provides an all-rounded, holistic advanced endoscopic training fellowship with an excellent environment for any trainee looking to spend a year abroad.



*Dr Glenn with (L to R) Assistant Professor Dr Alessandro Fugazza, Assistant Professor Dr Roberta Maselli, Dr Silvi Carrara and 2 other fellows at the Humanitas Hospital*

# Endoscopy 2022: AI in GI Endoscopy - The Future is Here

by Dr Shahreedhan Shahrani

Return of Endoscopy 2022, 3<sup>rd</sup> - 4<sup>th</sup> June 2022. As we enter the endemic phase of COVID-19, we too have returned to physical workshops and conferences and Endoscopy 2022 marks our first physical event. It was a 2-day event, starting off with the pre-congress events of GI Assistant (GIA course), EUS and ERCP workshop/hands on and the Young Consultants Forum. This was followed by our main congress on Day 2, with the opening ceremony officiated by Professor Ir Dr Shaliza Ibrahim, Deputy Vice-Chancellor (Research and Innovation) Universiti Malaya. The Universiti Malaya and MSGH Distinguished Lecture was given by Professor Dr Philip Chiu from Chinese University of Hong Kong. We had outstanding lectures and exciting live demonstrations from 4 international faculty members - Professor Dr Rajvinder Singh, Associate Professor Dr Christopher Khor Jen Lock, Associate Professor Dr Pradermchai Kongkam and Dr Bhavesh Doshi. We also had the honour of having excellent lectures given by Datuk Dr Jayaram Menon and Datuk Dr Raman Muthukaruppan.

The impact of Endoscopy 2022 was not only to learn from the experts and a sharing of knowledge, but to strengthen the bond amongst us, between endoscopists, between GIAs, between industries, between endoscopy units near and far, locally and internationally.

A huge thanks to Associate Professor Dr Ho Shiaw Hooi, our Course Coordinator of Endoscopy 2022, to Emeritus Professor Dato' Dr Goh Khean Lee, our senior advisor, to Professor Dr Sanjiv Mahadeva, Professor Dr Ida Normiha Hilmi, Professor Dr Chan Wah Kheong, to all of the consultants and colleagues, all the members of the organising committee of Endoscopy 2022, our distinguished speakers and guests, MSGH and MSGNMA, to all of our GI Assistants, our technical crew, our industrial support, our alumni and our registrars who assisted us, and lastly but certainly not least, to all those who have attended and participated. Without all of you, this event would not have been a success.

Thank you all for your support.





# Liver Transplant: The Last 20 Years, Past Present And Future

by Dr Haniza Omar

The first human transplant was performed in 1963 by a surgical team led by Dr Thomas Starlz from Denver, Colorado, United States. Advances in immunosuppression have dramatically enhanced patient survival. In the beginning of 1980s, improvements in organ preservation and surgical techniques have boosted graft and patient survival. Given these developments, liver transplantation is now considered the optimal form of therapy for end-stage liver disease.



Here in Malaysia, our first transplant started in 1993. Due to various limitations, it was not undertaken up until 2002. A liver transplant may be either from a deceased donor (whole liver) or living donor (partial - right or left lobe ) transplants.

Organ donation and transplantation were deemed legal in Malaysia with the passing of the Human and Tissues Act in 1974. Malaysia has an "opt-in" system for organ donation.

Human Tissue Act 1974 has authorization for removal of human tissues from the deceased - express consent, the rights of the next of kin to object, magistrate written approval for medicolegal cases. Following the issuance of National Organ Tissue and Cell Transplantation Policy 2007 their main objectives were to promote organ, tissue and cell transplantation as well as deceased organ and tissue donation and transplant in the country. It also aims to ensure transparent and equitable access to transplantation. There were also MMC Guideline on Organ Transplantation, Unrelated Living Organ Donation: Policy & Procedures, and Policy on the Supply of

Immunosuppressant which was subsequently published in 2011.

The Malaysian deceased organ donation process is based on WHO's Critical Pathway for deceased donation after brain death, including donor identification and eligible actual donors. The National Transplant Resource Centre (NTRC) is a dedicated national unit coordinating all aspects of organ and tissue procurement from deceased donors. NTRC is supported by Tissue and Organ Procurement Teams available at designated hospitals. These teams carry the responsibility of donor identification, donor management, consent, managing procurement, and post donation affairs.

Selayang Hospital, a government-based hospital, started its services in 2002 is one of the earliest institutions with a liver transplantation programme. A total of 127 deceased, living donor, adult, and pediatric liver transplantations have been performed since (updated July 2022).

Liver transplant services for adults in UMMC started in 2017 in collaboration with Hong Kong's Queen Mary University initially and to date, the hospital has successfully conducted 20 living related liver transplant surgeries.

The Woman and Children Hospital in Kuala Lumpur, now known as Hospital Tuanku Azizah Kuala Lumpur



*Dr Haniza Omar with the Hospital Selayang Transplant Team on regularly held meeting discussing suitable transplant candidates*

(HTAKL) started their services in 2018. The paediatric liver transplant service complimented the adult liver transplantation programme of Selayang Hospital and did their first living-related liver transplant in December 2020 right in HTAKL, which has made transitioning of pediatric liver transplant from Hospital Selayang a great success. This is a breakthrough for the pediatric liver transplant service in Malaysia since the last pediatric liver transplant performed in Hospital Selayang in November 2015.



*Liver transplant surgery, with Hepatobiliary Team Hospital Selayang in action*

The timing of liver transplant is crucial before life-threatening complications occurs, however at the same time, finding the balance of not transplanting too early as benefits may not outweigh risk of surgery or long term complications.

Priority of liver transplant is based on Child's Pugh score and MELD (Model End Stage Liver Disease) score. MELD score of > 15 is recommended for listing and a MELD > 35 predicts post-transplant mortality. MELD score does not impact post-operative complications. In some cases,

MELD held exceptions where extra points needed to be given to prioritize certain conditions.

In listing patients, they have to go through a comprehensive evaluation which includes a cardiovascular, respiratory, as well as a psychiatric evaluation. Comorbidity too, plays a role in their listing. Once that is all established, the committee will deliberate to see if the patient is suitable. Then the waiting begins. This could take as early as a month or up to two years in some cases.

Liver transplant should allow patients to enjoy the same state of health as they did prior to the disease. The goal should be to balance graft functioning, and a patient's psychological and physical well-being. One needs to consider compliance to the clinical follow-up and emphasise medication adherence as it will be life-long. Especially when patients starting to go back to activities of daily life as well as re-employment.

Liver transplant comes with challenges. To start, many of which who pledge to be a liver donor does not materialise, which leads to scarcity of cadaveric liver. This could be due to high donor family objections and unsuitable liver conditions available for donation - such as fatty liver. To assist some of these issues, Unit Perolehan Organ Hospital (UPOH) team was established in 2019 in 16 hospitals in Malaysia to help identify potential donors. On top of that, in trying to overcome shortage of organs, we have advocated adult living related liver transplant in 2020 and a split liver in 2021.



*The diseased liver (left) and the newly transplanted liver (right)*

The need for liver transplants in the country is high. Much effort is still needed. Hence, we should continue to have comprehensive training as well as having second tier scheme and succession planning. The discussion on having one standard wait list - Malaysian National Organ Waitlist (MyNOW) will indeed be a way forward. These would give new hope to patients, especially for the people with chronic liver diseases.

# Telehepatology

by Dr Tan Soek Siam



Telehepatology refers to the application of telemedicine in hepatology service. Telemedicine is a term coined in 1970s to mean “healing at a distance”. According to the World Health Organisation, there are 4 elements in telemedicine : (a) Provide clinical support, (b) Overcome geographic barriers to connect individuals that are not in the same physical location, (c) Involve various communication technologies, and (d) Improve health outcome.

The driving forces for telemedicine are the advancement and availability of mobile communication technologies with expansion of wireless broadband technology, escalating health epidemics and shortage of physician and nursing.

In my opinion, all of the above mentioned are like little pieces of the puzzles befitting our current local hepatology scene and we have most of the essential tools.

There are different types of telemedicine that we can consider to adopt and adapt for telehepatology.

Types	Details
Televisit	Usual patient-provider visit, but via video conference
Telesupervision	Mid-level provider or house officer presents to attending in another location (with or without patient present)
Telemonitoring	Signs or symptoms sent electronically from patient to provider team in another location
Tele-interpretation	Remote interpretation of radiology and other tests
Teleconsultation	Provider in one location presents a case to an expert in another location (with or without patient present; eg, ECHO or remote tumor board)

Assessing liver patients are important and cannot be fully replaced by remote methods. However, there are many ways we can assess a patient remotely. For example, looking for asterixes, gross ascites aided by

patient’s body weight with additional benefits of observing the home situation and support from the caregivers. Telehepatology has been adopted successfully for hepatitis C treatment, hepatocellular carcinoma, liver cirrhosis and liver transplantation.

From the patient’s perspective on telemedicine in general, surveys shows mostly are highly satisfied. However, there are factors found to decrease the degree of satisfaction which are chronic conditions, life-threatening illness, and incomprehensible information during the telemedicine. These can be real issues with our liver disease patients and should be taken into account.

Nevertheless, in certain categories and management of liver patients, telehepatology in the form of teleconsultation involving the local clinician with or without simultaneous participation of the patients could complement their care and management. One of the area is liver transplant assessment. Studies have shown that distance from transplant center is a negative prognostic indicator and associated with higher mortality. Although our liver transplant programme is not at the stage of expansion to more centres for many obvious reasons, we could still work within our resource limitations to make liver transplantation more patient-centered and accessible.

Various studies on the use of telemedicine for transplant evaluation have shown the practice of telehepatology enables expedite evaluations and listing for liver transplantations. Moreover, using e-consult to triage patients also reduces the rates of non-candidates for transplantation at the time of initial referral, and was less likely to be found non-candidates at the time of completion of transplant work-up. Fewer patients were turned down for transplantation because of psychosocial issues, co-morbidities, or progression of hepatocellular carcinoma beyond the Milan criteria. This can certainly decrease wastage while optimizing the use of our limited resources and also avoid unnecessary burden to the patients and their families.

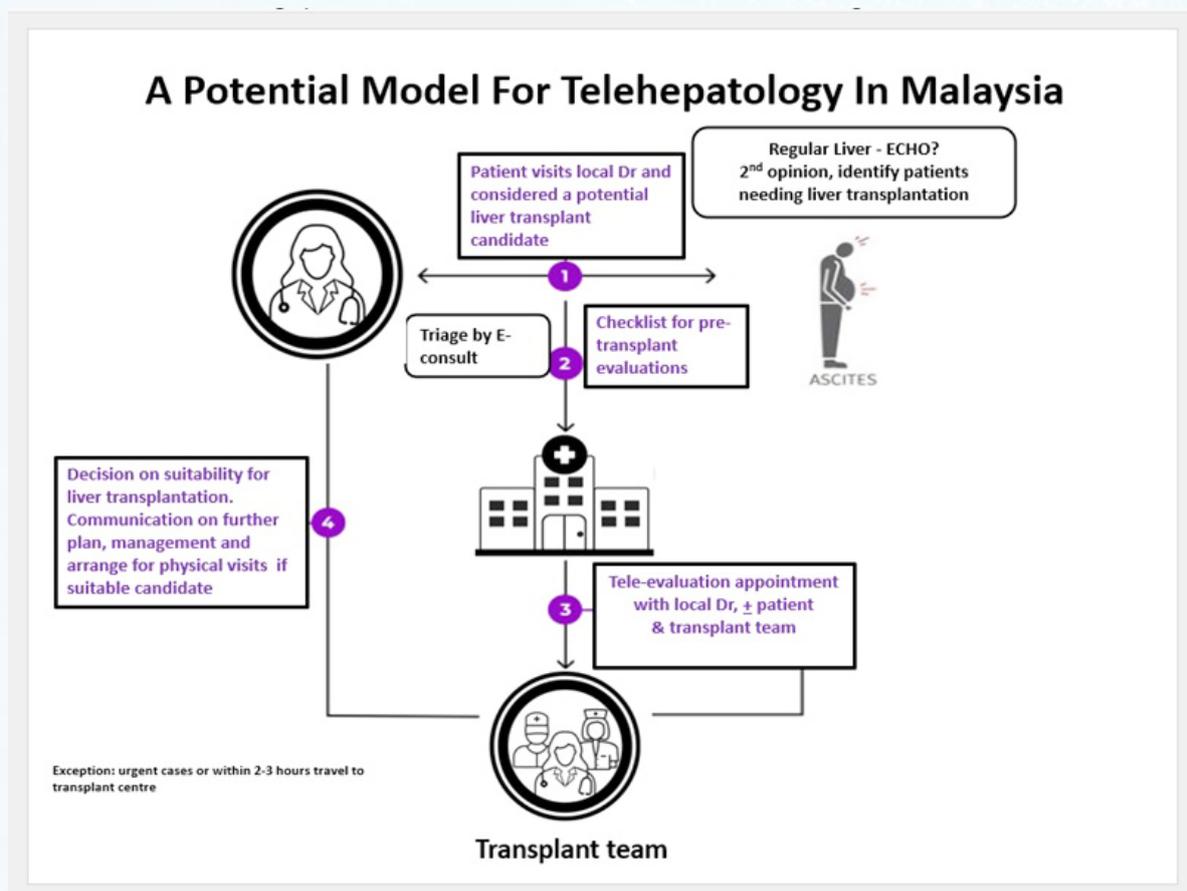
Telemedicine was also tried in the post liver transplant setting using standard discharge education, home

monitoring for daily temperatures, bodyweight, blood pressures, pulse rates and blood sugar with instructions when to call the coordinator. This was carried out with the use of smart tablet, peripheral bluetooth devices to deliver daily text messages or reminders, education

videos and facetime videos. The study showed the telemedicine group has a significantly lower 90 day readmission rates with the largest difference at 31-90 days after discharge. It also reported significant improvement in the patient's quality of life.

### The pros and cons of telehepatology in the field of liver transplantations

Pros	Cons
<ol style="list-style-type: none"> <li>1. Efficiently triage patients in need of urgent in-person evaluation</li> <li>2. Expedite time from referral to evaluation and listing</li> <li>3. Identify barriers to transplantation and avoid futile evaluations</li> <li>4. Reduced costs to patients (travel, time lost from work, parking etc)</li> <li>5. Ease of access to liver transplantation for patients with geographic barriers</li> <li>6. Enhanced relationship between transplant centers and community physicians</li> <li>7. Unique glimpse into patient's home situation which may uncover social issues or strengths</li> </ol>	<ol style="list-style-type: none"> <li>1. Limited physical examination (e.g., signs of \ decompensation, assessment of frailty)</li> <li>2. Not suitable for all patients (e.g., very ill, difficulty with the technology or technology not available)</li> <li>3. Difficult to observe interactions among family members and other caregivers</li> <li>4. Alienating patients with low health and digital literacy or rural populations with limited internet access</li> <li>5. Harder to establish rapport and hold difficult conversations via video</li> <li>6. Difficult to build rapport and initiate a potentially lifelong provider-patient relationship</li> </ol>



### REFERENCES

Marina Serper and Michael L Volk. Current and Future Applications of Telemedicine to Optimize the Delivery of Care in Chronic Liver Disease. *Clinical Gastroenterology and Hepatology* 2018;16(2):157-161

Hoyt and Reynolds. The Patient Perspective on Telemedicine. *Clinical Liver Disease* 2022;19(4):167-170

Binu V John, E love, B Dahman, N Kurbanova, et al. Use of Telehealth Expedites Evaluation and Listing of Patients Referred for Liver Transplantation. *Clinical Gastroenterology and Hepatology* 2020;18(8):1822-1830.e4

VR Konjeti, D Heuman, JS. Bajaj, HC Gilles, et al. Telehealth-Based Evaluation Identifies Patients Who Are Not Candidates for Liver Transplantation. *Clinical Gastroenterology and Hepatology* 2019;17:207-209

Hersh Shroff and Laura Kulik. Telemedicine for Liver Transplant Evaluations: The Benefits and Risks. *Clinical Liver Disease* 2022;19(4):157-160