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BERITA Anestesiologi

Malaysian Society of Anaesthesiologists

College of Anaesthesiologists, AMM

THE RISE OF OMICRON

Message from the President of the MSA

Professor Dr Ina Ismiarti Shariffuddin

Dear esteemed members,

Assalamualaikum and Selamat Sejahtera to all. I hope it is not too late to wish you a Happy New Year. We had hoped 2022 would be a better year, and the pandemic of COVID-19 will end. Unfortunately, COVID-19 is still very much around. Many published papers showed that with COVID-19, Anaesthesiologists are at risk to be clinically depressed and experience burnout. We would like to encourage our members to participate in our activities and know that you are not alone. Therefore, it is my pleasure to share with you the activities we have done for the past three months and some exciting activities planned for the year 2022.

Malaysian Society of Anaesthesiologists and College of Anaesthesiologists, AMM, Annual Scientific Congress 2022

We are excited to invite all of you to attend this premier meeting held from 4th to 8th August 2022. Our Congress's theme is "My Anaesthesia 2022: FOCUS - Forging Onwards to a Collaborative Unified Success". This will be a hybrid meeting, so please mark your calendar and look out for updates from time to time in the email and our social media.

MSA and CoA Webinar (KITE Webinar)

To encourage continuous medical education in our fraternity, MSA and CoA have arranged monthly webinar in collaboration with other anaesthesia subspecialty societies/SIG and pharmaceutical industries in Malaysia. Since January 2022, we have rebranded this CME as KITE Webinar Series (webinar to update **K**nowledge, **I**nformation, **T**raining, and **E**ducation) in Anaesthesia and Critical Care. The topics we presented in the KITE series included "Perioperative Temperature Management" and "Forum on Entry to Postgraduate Anaesthesiology & Critical Care Training Masters Programme". Our Education Committee has arranged many exciting topics for the whole of 2022, and we look forward to members' participation. As a bonus, CME points will be awarded to all participants.

Meeting with Medical Practice Division, Ministry of Health (MOH) with regards to Anaesthetic Fee Schedule

Our representatives, Dr Raveenthiran and Dr Gunalan had a meeting earlier last month with MOH to address these issues. MOH is targeting to make amendments to the Anaesthetic fees. The detailed discussion about the individual procedure fees and new additional procedures to be added to the schedule will be held with our Society in the next few months by MOH. Work is in progress to prepare and present the amendments and attain approval hopefully by next year. Meanwhile, we would like to invite members to give feedback and suggestions on the current fee schedule. We will send out an official email to all members with regards to this.

Malaysian Journal of Anaesthesiology (MyJA)

We are excited to announce that the Malaysian Journal of Anaesthesiology (MyJA) accepts submissions from 1st March 2022. We welcome case reports and case series, original articles, and letters to editors. We aim to have our first publication in May/June 2022.

Please use the Submissions link to submit your articles on the MyJA website, https://www.myja.pub.

If you have any queries, please contact our editors at hello@myja.pub. We look forward to featuring your research in our journal!

MSA Property in Damansara Utama

As all our members know, we have a property (a three-story shop lot) in Damansara Utama. Last year, due to COVID-19 affecting the economy, we had not managed to rent out a part of the unit, i.e., the ground floor and the first floor. However, starting from April/May 2022, both units will be tenanted. In the meantime, some repair works will need to be done in March before handing over to the new tenants.

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Message from the Editor-in-Chief

Hello, March 2022! It is that time of the year when the colours of the vernal equinox brighten the northern hemispheres while rustling gold and red autumn leaves descend upon the south. Closer to our tropical equatorial climate, anaesthesiologists have persevered with unwavering determination for the past two years embroiled in what seems like a never-ending struggle.

The Berita Anestesiologi has previously featured many inspiring heroics of the anaesthesiologists battling pandemic blues. As we continue to grapple with the onslaught of the Omicron wave, this year's submissions seem to have pivoted towards a change. Most authors have switched their focus, yearning instead for normalcy or at least near normalcy to resume.

We support this paradigm shift in the narrative and invite you to share your views, thoughts and even pictures of happier times.

Stay positive, but COVID-19 negative.

Dr Anand Kamalanathan

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Future International Conferences

We encourage our members to participate in the international conferences conducted in our region. Both meetings will be conducted in a hybrid format.

1. The 22nd ASEAN Congress of Anaesthesiologists (ACA) will be held on 18th - 19th March 2022 in Hanoi, Vietnam.

2. The 16th Asian Australasian Congress of Anaesthesiologists (AACA) will be held on 10th November (Thursday) to 13th November (Sunday), 2022, at Coex, Seoul, Korea, in conjunction with the 99th Annual Meeting of the Korean Society of Anesthesiologists and the 74th Annual Meeting of the Korean Pain Society (KPS).

Till we meet again in the next issue, I hope all of you will stay strong, keep safe and adhere to the appropriate SOPs while at work and in the community. We look forward to meeting all of you at the KITE webinars and our ASC.

Contents

Acumen HPI software combined with a treatment protocol achieved statistically significant reduction in hypotension vs. standard of care[1,2]

Two randomized controlled trials have shown that using Acumen HPI software in combination with a hemodynamic treatment protocol significantly reduced the incidence and duration of hypotensive events* in patients undergoing noncardiac surgery.[1,2]

Results from Wijnberge, et al publication in JAMA[1]

- Elective, noncardiac surgery patients monitored with Acumen HPI software in combination with a treatment protocol, had a median time of hypotension per patient of 8 minutes compared to 32.7 minutes in the control group, a 75% reduction in intraoperative hypotension
- Time-weighted average of hypotension combines the duration and the severity of hypotension corrected for the total duration of the procedure; with Acumen HPI software and a treatment protocol, the study showed a reduction of 77% in the median time-weighted average of hypotension in comparison to the control group (0.10 mmHg in the interventional group versus 0.44 mmHg in the control group)
- The Acumen HPI software secondary screen provided insight into the potential root cause of hypotension, enabling clinicians to identify the appropriate treatment course

Results from Schneck, et al publication in Journal of Clinical Monitoring and Computing[2]

- Acumen HPI software combined with protocolized treatment was shown to reduce the relative and absolute duration of hypotensive events in total hip arthroplasty patients, in comparison to a historical and prospective control group
- The interventional group also saw a 50% reduction in the incidence of intraoperative hypotension

Scan here to see Wijnberge, et al & Schneck, et al clinical data

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**A hypotensive event is defined as MAP <65 mmHg for a duration of at least one minute.*

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1. Wijnberge, M., Geerts, B., Hol, L., Lemmers, N., Mulder, M., Berge, P., Schenk, J., Terwindt, L., Hollman, M., Vlaar, A., Veelo, D. (2020) Effect of a Machine Learning-Derived Early Warning System for Intraoperative Hypotension vs Standard Care on Depth and Duration of Intraoperative Hypotension During Elective Noncardiac Surgery: The HYPE Randomized Clinical Trial. JAMA Online, February 17, 2020. doi:10.1001/jama.2020.0592 https://jamanetwork.com/journals/jama/article-abstract/2761469
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The Pursuit of Happiness: A Well-Being Initiative of the Department of Anaesthesia University Malaya Medical Centre (UMMC) during the surge of the COVID-19 Pandemic

by Dr Wan Aizat Wan Zakaria
University Malaya Medical Centre, Kuala Lumpur, Malaysia

Hap·pi·ness: a state of well-being and contentment. - Merriam-Webster Dictionary

I: All you need is love.
"The most beautiful things in the world cannot be seen or touched; they are felt with the heart." - Antoine de Saint-Exupery, Le Petit Prince.

I am certain that everyone has encountered random acts of kindness at some point in their lives. For instance, when the person sitting in the same row as you offered to help stow your luggage on the flight, or when someone in the queue paid for your parking ticket when you did not have enough change, or when the barista gave you a free cuppa on your post-call morning. Although many of these are simple gestures, any act of kindness, no matter how small it is, has value. Trust me, not just because I'm an Anaesthetist - it does make a difference in the lives of others. And just like that, the world becomes a better, much happier place.

II: Eight days a week.
"Happiness can be found, even in the darkest of times, if one only remembers to turn on the light." - Albus Dumbledore, The Prisoner of Azkaban.

It felt like the darkest of times when we were in the midst of the recent surge in COVID-19, which was by far our worst hit. I cannot describe how good it is to be able to write this sentence in the past tense. Everyone was at their lowest point, mainly because it seemed like a never-ending battle. Most of the patients that we received in ICU, despite being young, were very ill. Consequently, we have lost many patients who were about our age, with children who were the same age as ours. Each time that happened, a thought crossed my mind that it could easily have been me.

Ever since the pandemic started, awareness on well-being has increased tremendously and, the well-being of healthcare professionals has become a worldwide crisis. Our department was not excluded as well, as a quick survey revealed an unsurprising appalling lack of well-being. Everyone was either burnt out, frustrated, bitter, angry, hungry or any of these in combination. That evening as I was having my daily dose of soft serve (more than usual after reading the comments from the survey), my three-year-old son asked me, most probably I hope, after watching the show *Peppa Pig* "Are you happy, Mummy Pig?"

Two things struck my mind:
(1) I have to stop eating.
(2) Yes, despite everything that was happening, I am actually happy, contented, and at peace. Thanks to the mint chocolate ice cream, which brings me back to Number 1.

I found my happiness quite easily in this pint of Baskin Robbins. If this joy can be shared, why not?

III: I want to hold your hand.
"Happiness consists more in small conveniences or pleasure that occur every day than in great pieces of good fortune that happen, but seldom." - Benjamin Franklin.

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Addendum

Addendum to the article History of Anaesthesiology in Malaysia, Berita Anestesiologi November Vol 30, page 19-24.
We wish to acknowledge and sincerely apologise for some inaccuracies in the content of the above article with regards to the history of the Master of Anaesthesiology programme of Universiti Sains Malaysia in Kubang Kerian, Kelantan. The corrected version is as below.

The programme started in 1993 with Dr Aminuldin Bin Ghani as the Head of Department. He was assisted by Dr R.M.J. Lobo, Dr Kamarudin Jaalam, Dr Sanjay Sharma, Dr Azizi Ahmad, Dr Nik Abdullah Nik Mohamad, Dr Badrul Hisyam Ismail dan Dr Zulkarnain Hassan. The first batch of graduates were Dr Wan Aasim Bin Wan Adnan, Dr Mahamarowi Bin Omar, Dr Wan Azzlan Bin Wan Ismail, Dr Mazelan Bin Omar and Dr Abdullah Sabri Bin Ibrahim, who graduated in 1997. Professor Dr Shamsulkamalrujan Hassan, Dr Saedah Ali, Dr Ruwaida Isa dan Dr Usha Nair were the 3rd batch of graduates.

REFERENCES
1. Written communication from Professor Dr Nik Abdullah bin Nik Mohamad, Department of Anaesthesiology & Intensive Care USM, Kubang Kerian, Kelantan

continued from page 5

The Nordic countries have consistently topped the rank of the world's happiest countries, with Denmark always being the happiest nation for several years in a row. Besides having a Happiness Research Institute to study what makes people happy (I know, right), they have an excellent welfare model that invests in the quality of life of its citizens. One of the Danish recipes for happiness is something they call *"hygge"*, which originated from a Norwegian word that means "well-being". Hygge is described as a feeling, like being hugged, but without physical contact. It is also a culture of enjoying life's simple pleasures.

So confectionery, cakes and pastries are what the Danes label as *hyggelige*, or simply, food that brings happiness. This prompted our very first project, the well-being boxes which were filled with chocolates, sweets, cakes, and of course we also had ice cream. These well-being baskets include essentials after doffing, such as shampoo, body wash, sanitising spray, and lozenges.

Soon after came the days when the guys in the department suspiciously smelled better going than when coming from home. Also, many were caught with crumbs on their scrubs or even chocolate smudges, for the more serious well-being enthusiasts. Most importantly, everyone looked a little bit cheerier and the unit felt a little bit warmer, or as how the Danes would put it - *hyggeligt*.

IV: With a little help from my friends.
"A true selfless act always sparks another." - Klaus

Following the initiation of the well-being boxes, that week we received another two carts of snacks and sweets, a few lunch sponsors and a collection of RM 1500 into our well-being fund.

Many of these came from colleagues, friends and family.

In July 2021, Mercy Malaysia UK held an afternoon tea where all proceeds from the event were donated to several COVID-19 hospitals, one of which was to us. They also had cake sales and sold homemade *kaya* which was among the most wanted item around London *(don't play play)*. With the money which summed up to about 1500 pounds, we put together well-being kits for everybody, including the deployed staff. The kits came with a chocolate bar, tea bags, hand cream and more shower gel - because everybody loves good-smelling front-liners.

Our first well-being box

Anyone will be happy when receiving a gift, however the truest joy actually lies in giving. That is why some wise wo/man said that the fragrance always stays in the hand that gives the rose.

Those who contributed to the donations might not have known that it was the sincerity in their actions that moved us the most, and because of that we remain **forever** grateful.

V: Come together.
"We all live with the objective of being happy; our lives are all different and yet the same." - Anne Frank, *The diary of a little girl*.

Under normal circumstances, it would be difficult to drag an anaesthetist out of his nook… imagine trying to do so during the pandemic. However, not all anaesthetists are introverts. That is the reason why we chose this speciality where all our patients are asleep most of the time. As expected, our first online Zumba session only gathered a handful of participants. It was then that I learnt how to find gratitude in the small victories, as the saying goes: little by little, a little becomes a lot.

A bit more effort was put in to explore other activities that might interest the crowd. Now, there is this mysterious table tennis table that has been lying around since I first joined UM. Apparently, it is made available to all staff; however, I suspect some do not know of its existence. I'd like to think of it like the "Table of Requirement" that only appears when a person is in great need of table tennis. So, we brought our net, bats and balls and there have been a few gleeful sessions of hitting (more of picking up, of course) some balls after office hours. This had attracted a different crowd altogether and that was when I felt we began to understand everyone a little better.

VI: Don't let me down.
"Verily in the remembrance of God do hearts find rest." Ar-Ra'd 13:28

As much as physical and psychological well-being, one's spiritual needs are equally important and must be addressed. More often than not, the chaos and stress of our day-to-day work may cause our inner peace to

First online Zumba with Darlyn

dwindle, with or without us realising it. Spiritual well-being does not necessarily involve religious beliefs; however I personally feel that a large part, if not all of my spiritual wellness, is closely related to my relationship with the Creator, as stated by Ibn Qayyim, *"Truly in the heart there is a void that cannot be removed except with the company of Allah."* For that reason, for Muslims in the Department, an online *Tazkirah* was organised during which we were given the opportunity to read and discuss in depth some chapters in the Quran. The responses after these sessions were always uplifting, leaving a good feeling of absolute harmony and peace.

Filling the pigeon holes with well-being packs

VII: Here comes the sun.

"Every one of us is like a butterfly. Each tiny flap of wing toward a positive mindset can send ripples of positivity through our organisations, our families, and our communities." - Shawn Achor

When we officially became full-fledged doctors, I remember reciting the Hippocratic Oath with the rest of my classmates. Among the many pledges, one of them was *"I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug."* Never has this been more true, especially during the days of the pandemic.

While sitting at this small garden near the cafeteria one morning trying to conclude this long overdue piece, I saw two of the ICU physiotherapists wheeling a patient with a familiar face. He was one of our COVID-19 survivors - the *penghulu*, a term we give our unit's longest-staying patient. As they walked past, one of the physiotherapists chuckled and said, *"Kami jalan-jalan Doc, bawa Encik A makan angin."* The patient nodded and I could see a smile from the corners of his eyes.

First impromptu ping pong session on the "Table of Requirement"

First online Tazkirah with Ustaz Muhamad

Although the COVID-19 pandemic was what some would call a slap-in-the-face moment, I'd like to also think of it as a blessing in disguise. It has taught us to be grateful even for the littlest things and to cherish those we have in our lives. It also made us witness the re-emergence of our resilience and inner strengths and proved that we can do wonders, when together. I turned around only to watch Encik A being wheeled towards the unit, leaving me with an overwhelming feeling of happiness. I don't know about the rest, but I know for a fact, with the team of comrades that I have, we could and would have done it again for Encik A, a thousand times over.

The afternoon tea fundraising event in Putera Puteri, Bayswater London

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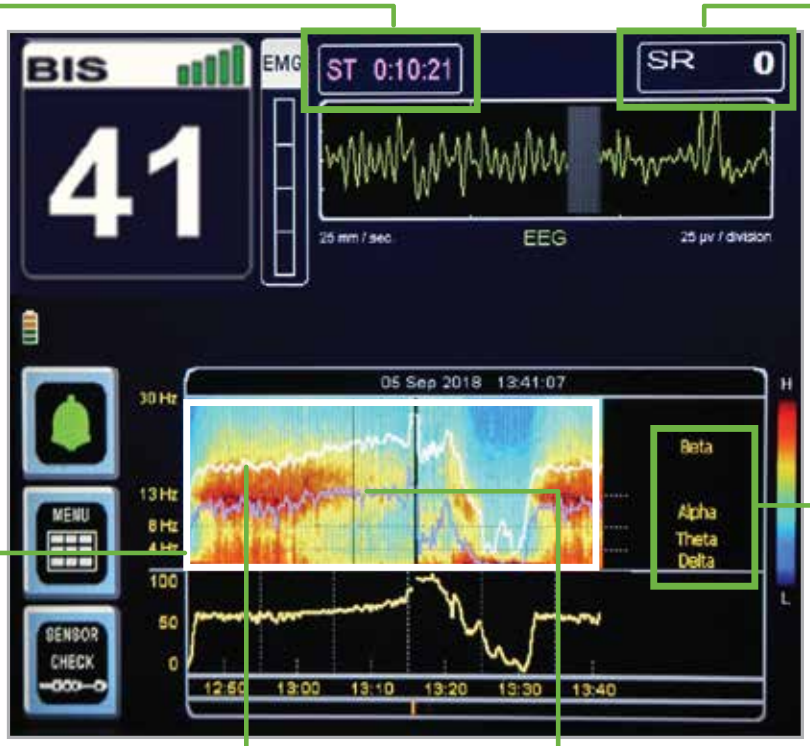
- Median Frequency (MF)1–34–6,10,12

Suppression Time (ST):
Display of the cumulative time spent in suppressed (isoelectric) state

Suppression Ratio (SR):
Parameter that displays the percent of time over the last 63 seconds that the EEG was flat or isoelectric



Density Spectral Array (DSA)
is the graphical representation of the patient's EEG frequency and power

Spectral Edge Frequency (SEF)
is displayed on the DSA graph where 95 percent of the total power lives below the line and 5 percent above

Median Frequency (MF)
is shown on the DSA graph, 50 percent of the power is below that line and 50 percent of the power is above that line

EEG bands
are displayed next to DSA to track anesthetic administration

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Journey to the West: A Story of a Newbie in Peri-Operative Medicine

by Dr Fadzwani Basri
University College London Hospital, United Kingdom

How I Started My Journey?

After completing my six-month period of gazettement, I have always been searching for what was next for me, my life and my career. I have been asking around seniors and colleagues, listening to their experiences and hoping to find inspiration. A senior colleague once told me about an evolving new area of interest in the Anaesthesia fraternity known as Peri-operative Medicine (POM). So, I started searching for its definition and what it was all about until I found a free online course organised by the University College of London via Future Learn. I would certainly recommend this online course to anyone interested in POM. It was eye-opening and provided me with some answers on what can be improved to provide quality and better care for surgical patients. It is very much related to my experiences working in Hospital Kuala Lumpur, where I often dealt with high-risk patients, including the frail and elderly in need of major surgery. I felt frustrated when I thought I could not offer much other than giving the best anaesthesia intra-operatively. I would then hand the patient back to the surgical or intensive care team postoperatively without knowing much about the patient's proper recovery plan. After completing the online course, I was determined to learn more about POM, even though the pathway was uncertain and still vague until now. After a series of discussions with my superiors, husband and family, I embraced difficulties at many levels to come to London to train in POM at University College London Hospital (UCLH). At the same time, I would pursue a formal MSc at UCL.

What is Perioperative Medicine?

We might have heard the idea of designating the Pre-operative Assessment Clinic as a one-stop centre.

I and my super energetic supervisor, Associate Professor Dr Robert Stephens, Consultant Anaesthetist and Perioperative Medicine Physician

Perioperative medicine is actually beyond that. As the name suggests, it is a holistic, patient-centred approach to perioperative care involving multidisciplinary teams instead of speciality-centred care. A perioperative team works in collaboration to evaluate the patient. The aim is to design an individual care plan to optimise the patient's level of fitness prior to surgery through pre-habilitation to achieve the best surgical outcome. The team does not necessarily involve a surgeon and may include general physicians, geriatricians, physiotherapists, dedicated nurses, with the anaesthetist perhaps being the leader of this multidisciplinary of care. Most of us may already be familiar with Enhanced Recovery After Surgery (ERAS) programme, which is an essential model of care in POM.

My first task as a meeting coordinator and organiser for POM Induction day. With the Director and Professor in Perioperative Medicine, Professor Dr David Walker (6th from right), Consultants and POM fellows

Training Opportunity

In developed countries such as the United Kingdom, Australia, USA and Canada, POM is already an established sub-speciality in the Departments of Anaesthesia and Critical Care in at least a few tertiary hospitals in every country. As for now, Malaysia-trained Anaesthetists who wish to build up our interest or perhaps "beautify" our CV, you may consider joining a Clinical Fellowship overseas. I think most centres would request, as an essential requirement for any sub-speciality training, the completion of FRCA, FANZCA, with some accepting the Malaysian equivalent. Other desirable requirements for POM Fellowship include basic knowledge and working experience in critical care units with some involvement in quality improvement projects or clinical audits and research. There is also another way to develop a career as a Perioperative Physician by going "back to school" and getting a formal scroll via a postgraduate taught programme from medical schools such as University College London and Monash University. These two

institutions offer flexible distant learning which you can be join remotely from any place of your practice. But, the tuition fees would undoubtedly cost a bomb unless you can find a sponsor.

My Role as a Senior Clinical Fellow in Perioperative Medicine at UCLH

I joined the fraternity as a Senior Clinical Fellow in Peri-operative Medicine or "POM Fellow" for short since August 2021. My most challenging part in this transition would be adapting to an entirely new role in a unique working environment and clinical rotation. My schedule is mainly divided into clinical and academic work. As POM services are part of the Critical Care Division, I manage patients in the Post Anaesthetic Care Unit (PACU) most of the time. This requires Level 2 and 3 hospital care based on UK practice while ensuring an enhanced recovery process can be carried out. It may sound too optimistic and challenging, but it can be done. I am fascinated by how the PACU staff are well trained in assisting the post-operative patient to do simple things such as Drinking, Rest, Eating, Mobilising and Sleep (DREAMS) without much instruction needed. There are 2 PACU sites, a 9-bedded one for Thoracic/Urology is a surgical centre at Westmoreland Street and a 10-bedded area for other major surgeries in the main UCLH building at Euston Road. This PACU rotation certainly allowed me an excellent training opportunity as it gave me a better understanding of how a surgical patient recovers and how we can improve a patient's condition pre- and intra-operatively. As a POM Fellow, I am also required to be involved in Pre-operative Assessment clinics. It is interesting to learn that most of the time, the clinic runs remotely, where a patient is screened and consulted via telephone. A face-to-face interview would typically be needed for shared decision making. This involves patients who have been identified as high risk (i.e. SORT score of >5%). A pre-habilitation programme could be offered to patients who had poor performance on Cardiopulmonary Exercise Test (CPET). Of all the different types of clinical work, I really enjoy "Emergency" week as the time is quite flexible, and I enjoy walking in different parts of the hospital and meeting new people. I help anaesthetists in theatre optimise patients pre-operatively, especially those scheduled for emergency laparotomy and do a follow-up review for some patients who have been stepped down from PACU. As POM is about multidisciplinary care, I feel grateful to be able to gain some experience in performing Comprehensive Geriatric Assessments peri-operatively together with the Geriatric team. The work might sound overwhelming, but it is certainly rewarding when we know the patients that we have anaesthetised are making good progress and have recovered fully. This fellowship also helped me build confidence in taking up a leadership role.

I and my POM fellows

Hopes and Dreams

I hope more and more anaesthetists will become interested in POM regardless of their level of training or experience. Anyone with any speciality background is welcome to be part of the perioperative care team. Perioperative medicine is undoubtedly a recognised "area of special interest" globally. However, being certified as a "Perioperative Physician" alone is meaningless without the buy-in from medical directors and healthcare policymakers in providing the support and infrastructure. It would be my dream to develop a "Centre of Perioperative Care" to become a hub for training, education and research in this area for the country. I know it sounds very ambitious, but we could always start by adopting certain aspects of POM such as mandatory pre-operative risk assessment, practising shared decision making when counselling a patient for high-risk surgery and considering ERAS as a standard of care.

Last but not least, I would like to take this opportunity to thank everyone that I have worked with, especially in HKL. They have truly inspired me to pursue my interest in POM.

"The journey of a thousand miles begins with a single step".

University College London, United Kingdom

Stepping into a New Direction in Cardiac Surgery with ERAS

by Dr Norhayati Anuar
Institut Jantung Negara, Kuala Lumpur, Malaysia

"Where a new invention promises to be useful, it ought to be tried" - Thomas Jefferson

Historically, Enhanced Recovery After Surgery (ERAS) was started in colorectal surgery by a small group of surgeons in Europe led by Henrik Kehlet. It was initiated in Sweden to improve surgical outcomes and patient recovery after surgery. Its main goal was to ensure that patients could return to normal functional status as quick as possible after surgery. Fast-forward, today this patient-centred multidisciplinary team approach has recently splayed out worldwide in different subspecialties, including cardiac surgery.

In cardiac surgery, the ERAS program was initiated in the U.S. since 2017 involving Coronary Artery Bypass Grafts (CABGs) and valvular surgeries. Comparing patients post ERAS implementation after one year, results showed that ERAS improves both clinical outcomes and patient satisfaction. This study showed a significant reduction in terms of opioid usage, shorter Intensive Care Unit (ICU), and hospital stay. Overall, recovery from surgery is faster with better care. A multidisciplinary team is needed to make ERAS successful.

Technology has become the world's driving force in this modern era and has led to many positive advancements. The use of social media and medical applications can be developed to facilitate the development of detail-oriented and patient-centred care. Most importantly, patients should be actively engaged with all activities planned for them.

There are 22 critical components graded according to currently accepted standards for level of evidence (LOE) and confidence of recommendation (COR) outlined by the ERAS cardiac society. These include preoperative optimisation until patients are discharged home. The preoperative programme mainly focuses on patient education and prehabilitation. Smoking and alcohol cessation, nutrition optimisation and target HbA1c<6.5% are proven to minimise respiratory, metabolic and infectious complications. This non-invasive intervention should be emphasised especially in non-emergency surgery. Patients should be referred for prehabilitation, particularly those with high frailty score, chronic lung disease to improve respiratory muscle strength and muscle mass, improve anaerobic capacity, and optimise glucose control and nutrition. Albumin levels can be used as a parameter for nutritional status. Oral or parenteral supplements can be given 7-10 days before surgery to achieve albumin levels of >3.0g/dL. A common practice for ERAS in other surgical populations is to encourage patients to drink clear fluids two hours before surgery, preferably carbohydrate drinks. Other than improving patient satisfaction and reducing anxiety, this is proven to reduce insulin resistance and perioperative hyperglycaemia as well as hasten the return of

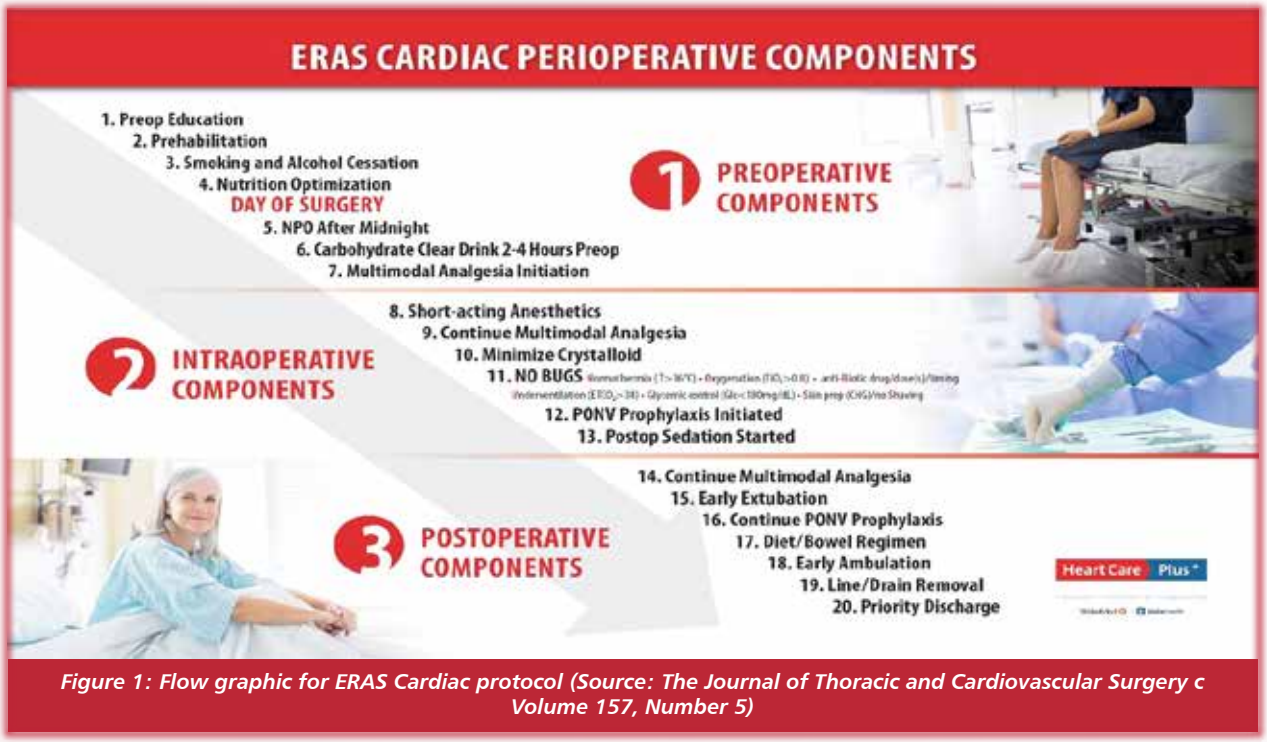

Figure 1: Flow graphic for ERAS Cardiac protocol (Source: The Journal of Thoracic and Cardiovascular Surgery c Volume 157, Number 5)

gastrointestinal function postoperatively. The special considerations in the cardiac populations are the higher risks of aspiration due to the high prevalence of diabetic gastropathy and the intraoperative usage of transoesophageal echocardiogram.

Together with other standards of patient care, intraoperative components include measures to reduce surgical site infection and bleeding. Some of the proven surgical recommendations are the use of rigid sternal wound fixations especially in patients with a higher risk of sternal wound infection; e.g. obese, chronic lung disease and long-term steroid therapy and avoidance of bone wax usage. Antibiotic stewardship is prudent to minimise infection risks and to prevent the emergence of antibiotic-resistant organisms. Proper administration of intravenous antibiotics is essential and should be discontinued as early as 48 hours after surgery. Unquestionably, severe or massive bleeding imposes additive morbidity and mortality burdens in cardiac surgery patients. Adoption of Patient Blood Management (PBM) together with the use of point of care testing are essential in surgeries with high bleeding risks. Anti-fibrinolytic agents such as tranexamic acid or epsilon aminocaproic acid are also proven to be beneficial in reducing blood products transfusion. There is plenty of literature focussing on the intraoperative use of tranexamic acid, suggesting a total maximum dose of 100mg/kg.

Perioperative goal-directed fluid therapy, glucose and temperature control are also included in ERAS guidelines. Goal-directed fluid therapy using special devices such as 'PICCO', 'FloTrac' and transesophageal echocardiogram (TEE) helps individualise intravenous fluids, vasopressors, and inotropes to achieve specific hemodynamic goals. Temperature control is crucial especially after separation from cardiopulmonary bypass (CPB). Patients should be gradually and adequately rewarmed, and careful consideration should be taken to avoid overheating patients (>37C) as this increases the risk of neurologic injury and mediastinitis. However, rather than hyperthermia, significant temperature drops are more commonly seen, especially in elderly, frail patients with a low body mass index. Prolonged hypothermia postoperatively increases infection, bleeding and mortality risks. Systemic reviews show benefits in terms of reducing ventilation times, mortality, complications and length of stay (Figure 2).

Another essential consideration is pain control. Poorly controlled postoperative pain can impact the quality of care. Multimodal analgesics including regional anaesthesia improve pain management and reduce opioid usage, thus minimising opioid complications. In ICU, patients are to be optimised and aimed for early extubation. Any factors that can lead to extubation failure should be identified and managed accordingly.

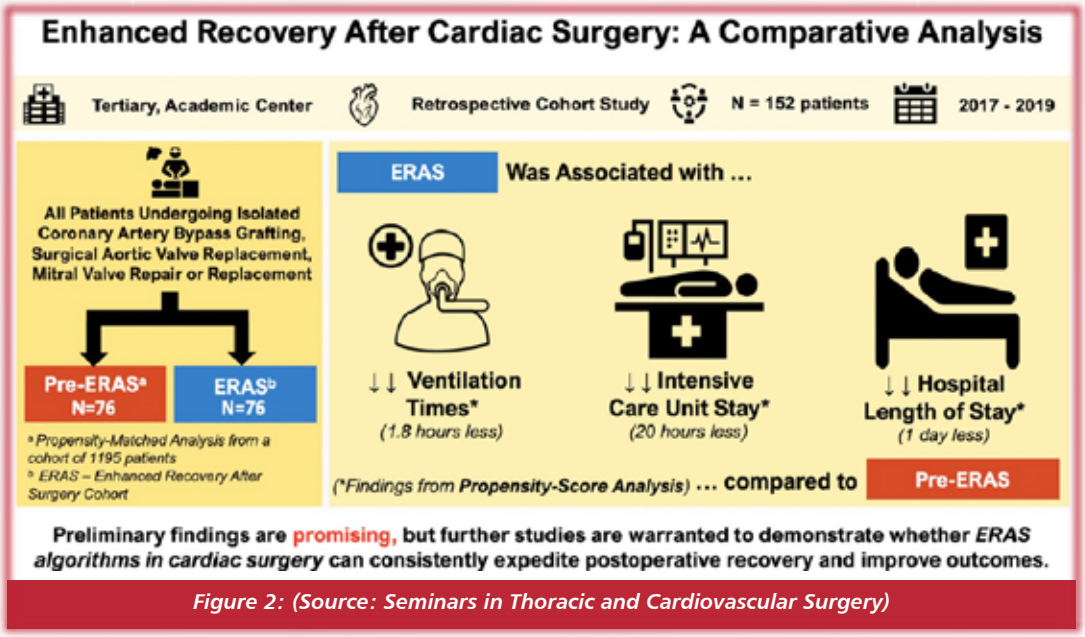

Figure 2: (Source: Seminars in Thoracic and Cardiovascular Surgery)

These seem like a mountain to move. Teamwork is essential for the successful implementation of these protocols and this can represent a challenge for some institutions. Lack of standardisation in perioperative care can negatively impact patient outcomes and increase the cost burden of surgical care. ERAS is seen as potential means to help standardise perioperative care, and current literature proves that it improves the quality of care and reduces costs. Moving forward, the next dilemma to solve is how to create a cost-effective programme, but with proper strategies and collaboration from individuals and organisations, this is definitely possible.

"Success often comes from doing common things uncommonly well."

Who wants to be a Millionaire? REITs Made Easy for the Anaesthesiologist

by Dr Abdul Jabbar Ismail
Hospital Queen Elizabeth, Kota Kinabalu, Sabah, Malaysia

The Classic Rental Property Investment

Let's begin this story with the typical property investment practice that most of us usually employ. An enthusiastic person with bountiful money to invest starts by applying for loans from a financial institution to purchase a property, primarily to rent it out, hoping that it will increase in value over time.[1] However, there are a plethora of complicated intangibles to ensure a successful investment venture. Indeed an arduous task, from location selection, studying rental rates of that area, financing rates of the loans, renovating either to increase its appeal and the rental rate of the unit, to finally engaging reliable and trustworthy real estate agents to hunt for equally reliable potential tenants.[2]

Property-rental investment ventures are not as glamourous as its often made out to be. Conversely, many horror stories are reported weekly in newspapers and gossip-laden magazines globally.[3] This ranges from major headaches such as destruction of residential properties by wild party-loving 'animals' to converting the property into illegal drug manufacturing labs (think Breaking Bad) as well as 'minor' cases of tenants refusing to pay rent. There are also very substantial risks such as poor returns of investment (ROIs), risks of excessive financing exposure, defaults on monthly payments, poor rental yields, and scams involving property "gurus" in Malaysia.[4] Property glut is real as Malaysia is experiencing an increasing number of unsold houses, and property prices have been declining and static at best for the past ten years.[5] Hence, traditional property play has skewed in favour of higher risks versus rewards and can be unapologetically brutal to the ignorant.

What are REITs (Real Estate Investment Trusts)?

REITs are investment holding funds that specifically invest in properties of various types, residential, commercial, hotels, industrial, offices, healthcare and warehouses. They are divided into units/shares which can be purchased by retail investors (commoners like us) and by significant investment funds such as the Employers Pension Fund (EPF), Permodalan Nasional Berhad (PNB), Khazanah Nasional and others, including foreign-owned funds.

The first Real Estate Investment Trust (REIT) was established way back in the 1960s in the United States. President Dwight D. Eisenhower signed the legislation on the 4th September 1960 to produce a new class of investment vehicles called REITs, to combine the best of commercial real estate investments with the ever-booming stock markets.[6] Shortly after, the first REIT was established and it was called American Realty Trust, which invested in commercial properties in the United States back then in the 1990s and is still around today.

Back in the Malaysian peninsular, on the historic date of 10th September 2004, Prime Minister Dato' Seri Abdullah bin Hj Ahmad Badawi in his 2005 Budget Speech in Parliament,[7] launched the REIT initiative to increase liquidity in the real estate sector to enhance economic development. This marked a significant shift for Malaysian companies to move to an "asset-light" strategy to improve their balance sheets and cashflow.[8] Following the announcement and subsequent ratification into legislation, under Malaysia's amended Income Tax Act, a new section called 61A effectively exempted REITs entirely from all kinds of tax, including the usual 28% corporate tax, Real-estate Property Gain Tax (RPGT) and stamp duties for property transactions. This exemption even extended to parties selling properties to REITs.[7] Isn't it too good to be true that REITs are 100% exempted from tax? Yes, it holds as long as the REITs abide by the Securities Commission Malaysia (SC). The SC regulates that REITs must return >90% of their distributable rental income to investors and maintain a healthy amount of debt (gearing ratio of <50%).[9,10]

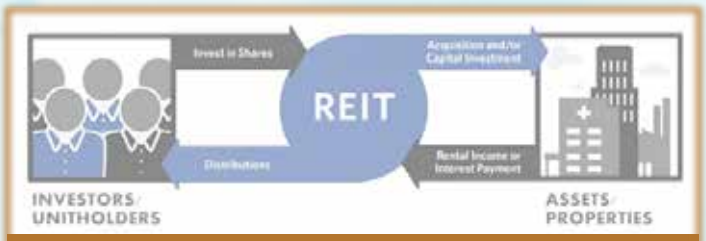

Figure 1: Relationship between Unitholders & REITs. Source: dividedmagic.com.my

In simpler terms, we buy the shares/unit (ownership) of a REIT company, and when the company receives rental income from the tenant, the REITs return >90% of the rental income (after excluding costs to maintain the properties and paying interest on debt financing) to the investors (shareholders) to continue enjoying tax-free incentives, which have been permanently fixed and ratified as legislation in Malaysia. Some REITs distribute rental income quarterly (every three months) and some annually.

M-REIT: Malaysian Real Estate Investment Trust; How to buy?

M-REITs are encouraged to be publicly listed on the Bursa Malaysia (our Malaysian Stock Exchange) to make it easier for retail investors to purchase and become owners and shareholders. Currently, all M-REITs are listed on the Bursa

Malaysia except for two, namely Amanah Hartanah Berhad and Alpha REIT. Our Inland Revenue Board of Malaysia imposes slightly different taxation rulings on these two REITs due to difficulties for investors to derive benefits easily.[12]

Outside the stock market bubble, the time taken to complete a transaction of property ownership can vary significantly between two parties. On average, it could take between weeks to months depending on the speed of the law firm, financier, buyer, and seller. However, within the stock market, these legal processes of property ownership exchange between seller and buyer can be shortened to less than one second. Everything can be done electronically at a click of a button on your mobile phone after you have intubated the first case of your elective list.

BLOOMBERG/COMPANY ANNUAL REPORTS

Performance of M-REITs on Bursa Malaysia

NAME	MARKET CAP (RM MIL)	SHARE PRICE APRIL 14 (RM)	YTD GAIN/ DECLINE (%)	DISTRIBUTION YIELD (TRAILING 12 MONTHS)
SENTRAL REIT	975.32	0.91	8	7.78
AMFIRST REIT	298.58	0.44	5	7.70
AMANAHRAYA REIT	384.06	0.67	6	7.59
YTL HOSPITALITY REIT	1,508.38	0.89	-1	7.58
UOA REIT	756.67	1.12	-1	7.54
KIP REIT	447.19	0.89	11	6.98
ATRIUM REIT	286.48	1.40	25	6.43
AL-'AQAR HEALTHCARE REIT	956.78	1.30	2	5.24
SUNWAY REIT	5,239.96	1.53	3	4.79
AXIS REIT	2,777.24	1.92	-4	4.56
CAPITALAND MALAYSIA MALL TRUST	1,442.72	0.69	13	4.38
TOWER REIT	171.11	0.61	7	3.98
IGB REIT	6,201.32	1.74	2	3.88
AL-SALAM REIT	350.90	0.61	12	3.44
KLCC PROP & REITS-STAPLED SECURITIES	12,637.33	7.00	0	3.36
PAVILION REIT	4,327.77	1.42	-4	2.91
HEKTAR REIT	279.49	0.61	-2	1.49

Figure 2: Source: The Edge Markets

There are currently 17 M-REITs listed[13] on Bursa Malaysia being transacted during Bursa Malaysia Market hours between 9.00am to 12.30am and 2.30pm to 5.00pm, weekdays from Monday to Friday. Transactions on Bursa Malaysia involve a minuscule 0.01% brokerage fee from your contract value and other negligible fees.

M-REIT: How risky is it?

As anaesthesiologists, we constantly worry about safety and risks. The legendary investor Warren Buffet once said, "The greatest risk lies in not knowing what you are doing",[14] and the first step towards knowing perhaps is you reading this now to learn about REITs for the first time. In general, different classes of REITs assets are Healthcare, Industrial, Commercial/Retail, Hotels, Offices and Warehouses. Most REITs focus on one category of assets, while some invest in different asset classes with sound strategies to increase returns to unitholders. Simply put, REITs are exposed to the same risks faced by conventional property investors: location, tenants' ability to pay rent, demand for the property, rental rates, build quality of the property, market forces, financing the loan interest and numerous other risks. REITs have different strategies and portfolios of assets that may flourish or dwindle through specific economic periods. Thus, as an investor attracted to "passive incomes" from M-REITs, i.e., receiving distributed rental income (you can think of rental payments as "dividends"), it is imperative to study the REITs themselves and choose one wisely.

Should I Buy M-Property or M-REIT?

Tales as old as time have been passed on by our forefathers that property investment is the best bet for future generations. In my opinion, property prices are unstable; some are affordable, while the majority are ridiculously high. Commercial, industrial, and offices are out of bound for many of us. The advantage of buying a Malaysian Property (M-Property) compared to M-REIT is 100% sole ownership of the property compared to a fraction or a percentage when purchasing M-REITs. However, the disadvantages of buying M-Properties are a lot more. Exposure to high amounts of debt financing to buy a single property could be hazardous, especially in the current economic uncertainty. The risk of repayment default is high and could derail our cash flow and personal finances. The high-risk nature of choosing a great location is coupled with high renovation expenses before finding a tenant, along with the cost of a property agent and lawyer fees to ratify the deal.[15,16] On top of this is the amount of precious time needed for troubleshooting in making this venture a success; time that could be better spent with our loved ones or doing more anaesthesia locum to increase our income.

One of the most important reasons for the establishment of REITs since the 1960s is for investors to get the benefits of property investments while leaving the hassles to the professionals. Our job as investors is to practice due diligence before choosing the most appropriate M-REIT according to our understanding and the nuances of current market situations.

In a typical REIT structure, provided here in Figure 4, the REIT Management Company (yellow boxes) will charge the REIT fund (pool of fund) a small amount of management fees to service and handle the accounting, rental collection and some also do their own management of the assets or employing other companies to service their assets and trustees will act on behalf of unit holders when certain business transaction requiring owners' (shareholders) signature and so on.

Shariah-Compliance M-REITs

For many Muslims in Malaysia, including me, one of the most important aspects to consider is whether an investment is Shariah-compliant or not. Luckily for us, Malaysia is the global pioneer for certification of shariah standards for all investment classes in Malaysia under the purview of the Securities Commission of Malaysia. The Shariah-Advisory council board within the SC oversees biannual reviews of all investment classes, including unit trust and public listed companies in Malaysia.

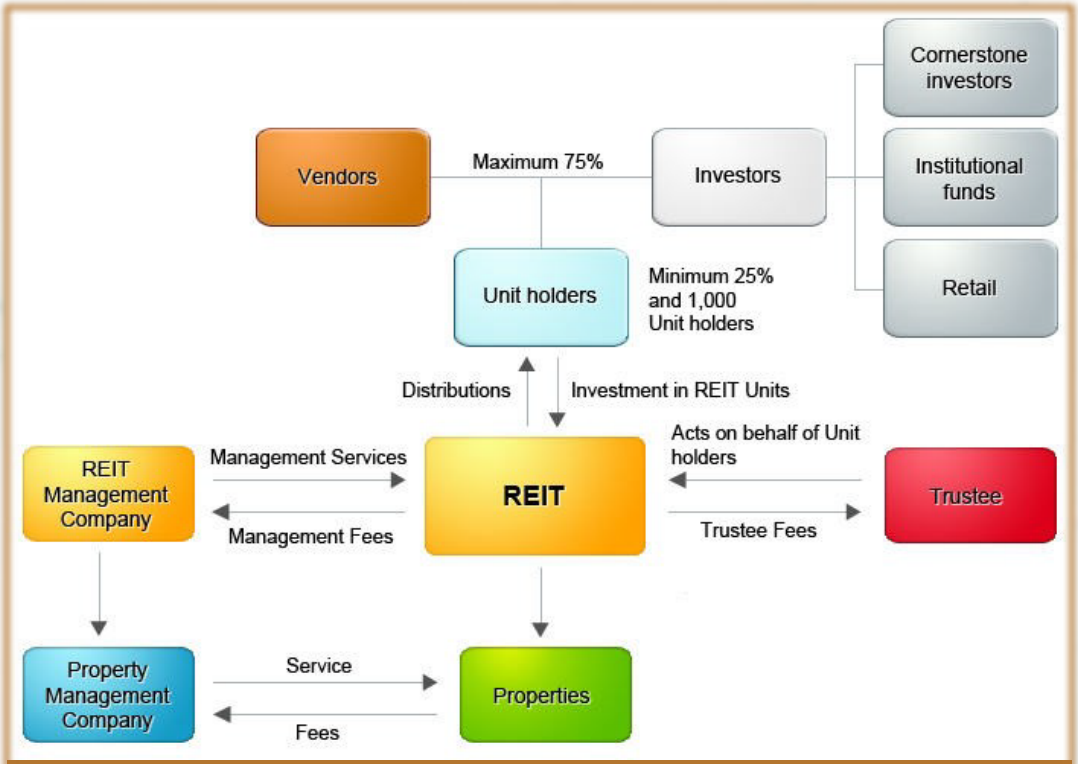

Figure 4: Typical Structure of M-REIT, source BursaMalaysia.com

Among the 17 listed M-REITs in Malaysia, 4 are Shariah Compliant, namely, Axis REIT (AXREIT), Al-Salam REIT (ALSREIT), Al-Aqar REIT (ALAQAR), and KLCC REIT. Being shariah-compliant does not automatically mean good returns to investors. It simply means that the REITs invest in Shariah-compliant assets and use Islamic debt financing for asset procurements.

How do I choose M-REITs to invest in?

1) ***Understand the Current Market Situation***

Before the pandemic, REITs focusing on hotels and shopping malls enjoyed their best returns, rental income distributions and rising share prices. Several examples include Hektar REIT (Subang Parade, Mahkota Parade, Kulim Central) & CMMT - Capitaland Malaysia Trust (Sungei Wang Plaza, The Mines, East Coast Mall) and IGBREIT (Midvalley Megamall) - almost an 80% increase in share prices from their IPO back in 2013, with a commendable 5.26% dividend yield in 2019.

However, over the past two pandemic-filled years, as economies tighten and businesses crumble, the rental markets have experienced a near-complete shut down for many months. Many people were out of work and companies were unable to meet their monthly rental payments with increasing vacant spaces in many REITs in Malaysia. Hotel REITs were also severely affected, with share prices and rental incomes of YTL REITs falling by 50%. Over this period, the worst performing REITs were the Shariah-Compliant Al-Salam REIT (ALSREIT), which holds KOMTAR JBCC, MYDIN Gong Badak, and KFC & Pizza Hut restaurants in Malaysia. They suffered a 70% drop in share prices, with shareholders only receiving 30% of pre-pandemic rental income distributions. The critical point is to understand current market conditions and observe for economic recovery. Recovery of many sectors, including retail, tourism, and hotels, may bear fruit towards many REITs upon opening our international borders.

REITs

REIT	DIVIDEND YIELD (%)	LAST PRICE (RM)	MARKET CAP (RM MIL)	ONE YEAR PRICE CHANGE (%)
Hektar	8.93	1.12	517.40	-5.88
CMMT	7.96	1.01	2,064.62	-29.37
MRCB-Quill	7.91	1.08	1,157.53	-12.90
KIP	7.39	0.79	396.66	-9.25
Atrium	7.21	1.11	135.20	0.00
Amanah Harta	7.16	0.74	162.80	-10.84
AmFirst	7.12	0.53	360.36	-22.22
AmanahRaya	6.59	0.82	470.04	-9.39
YTL	6.46	1.19	2,028.22	-1.65
UOA	6.22	1.30	549.73	-19.75
Axis	5.99	1.57	1,942.54	6.80
Sunway	5.64	1.76	5,183.34	3.53
Pavilion	5.36	1.62	4,919.46	0.00
IGB	5.26	1.74	6,150.57	8.07
KLCCP	4.75	7.68	13,864.96	-2.91
Tower	4.44	0.90	252.45	-26.23
Al-'Aqar	1.47	1.31	964.14	-5.76
Al-Salam	1.24	0.81	466.90	-17.01

as at Jan 2, 2019
Source: Bloomberg

Figure 5: 2019 Pre-Pandemic Returns of M-REIT. (Source Edgeprop.my)

2) ***Compare Share Prices to Net Asset Value and Distribution Yields***

A simple valuation parameter that can be obtained from Bursa Malaysia for each REIT company is the Net

Asset Value Portfolio (NAV) / Indicative Optimum Portfolio Value (under General Announcements in the Bursa Malaysia website). So, what is NAV? It's simply the value of assets in ringgit; minus all the bonds, debts and financing that the REIT has, divided by the number of units/shares that the REITs comprise. Imagine a REIT buying a property for RM20 million and deducting a loan of RM10 million. The Net Value is RM10 million, and you subdivide further into RM10 million units to arrive at a Net Asset Value per share of RM1.00. This is the value of the REIT asset. Some REITs will not announce their periodical NAV, but you can obtain the NAV for each REIT by simply "googling" their Quarterly Financial Report.

How do we apply this knowledge of the NAV? Stock markets are irrationally volatile and prices may fluctuate up or down for numerous unknown reasons. The presence of REITs within these markets exposes them to these volatilities, giving us opportunities to look into REITs that have irrationally dropped compared to their NAV per share. Outside the stock market, no matter how bad the economy is, it is sporadic to see sellers willing to trade below the actual initial purchasing value. However, this is a common practice in stock markets providing us with opportunities to buy REITs at the right price.

What about distribution yields? The distribution of rental income is calculated by dividing the number of dividends received per share by the purchase price per unit of REITs. However, this can be misleading as some REITs have justified price depreciation due to underperforming rental incomes from their vacant properties, such as the case of ALSREIT. The key is to study which REITs continue to have consistent income in terms of rental and tenancy ratio but have suffered an irrational share price reduction over the pandemic.

My Personal Experience Investing in M-REITs and Their Returns so Far

Despite being a seasoned stock market investor, I have only recently started building a stable portfolio and accruing "passive income" from REITs. I had purchased a small amount of 6,000 units in Axis REIT (AXREIT) - a Shariah Compliant REIT, in early 2020, when I bought at RM 1.83 per share. Over the past two years, I have received eight quarterly payments credited directly into my Maybank Savings Account (I'm using Maybank Share Trading Account), to a total of 15.8 cents per share, in percentage wise around 8.63% returns over two years (4.3% per annum). If I bought AXREIT in 2006 at RM 0.60 per share, my dividend returns this year would be around 20% per annum, an excellent passive income every year in addition to capital appreciation of the shares. But before I explain further, I need you to understand that this is not a call to buy urgently before you are ready. Understand that all profits or losses incurred are your responsibility, and you need to research before buying.

FifthPerson	IPO		Distributions		Share Price		Return (capital appreciation + distributions)		
	Year	Price	Amount		15-Feb-21		Total		CAGR
Axis REIT^	Aug-05	MYR 0.63	MYR 1.28	204%	MYR 1.92	207%	MYR 2.57	412%	10.74%
Pavilion REIT	Dec-11	MYR 0.88	MYR 1.07	121%	MYR 1.36	55%	MYR 1.55	176%	10.68%
Sunway REIT	Jul-10	MYR 0.89	MYR 0.86	97%	MYR 1.42	60%	MYR 1.39	156%	8.93%
Amanah Harta Tanah PNB*	Jan-05	MYR 0.71	MYR 0.97	136%	MYR 1.00	41%	MYR 1.26	177%	6.57%
Sentral REIT (MRCB-Quill)	Jan-07	MYR 0.84	MYR 1.06	126%	MYR 0.93	10%	MYR 1.15	137%	6.34%
Atrium REIT	Apr-07	MYR 1.05	MYR 1.10	105%	MYR 1.30	24%	MYR 1.35	129%	6.09%
Al-'Aqar Healthcare REIT	Aug-06	MYR 1.00	MYR 1.06	106%	MYR 1.32	32%	MYR 1.38	138%	5.94%
UOA REIT	Dec-05	MYR 1.03	MYR 1.47	143%	MYR 1.09	6%	MYR 1.53	149%	5.86%
YTL Hospitality REIT	Dec-05	MYR 1.02	MYR 1.07	105%	MYR 0.86	-16%	MYR 0.91	89%	4.06%
Hektar REIT	Dec-06	MYR 1.05	MYR 1.25	119%	MYR 0.58	-45%	MYR 0.78	74%	3.77%
Capitaland Malaysia Mall Trust	Jul-10	MYR 0.98	MYR 0.80	82%	MYR 0.62	-37%	MYR 0.43	44%	3.39%
AmanahRaya REIT	Feb-07	MYR 0.94	MYR 0.84	90%	MYR 0.65	-31%	MYR 0.55	59%	3.37%
Tower REIT	Apr-06	MYR 1.07	MYR 1.16	108%	MYR 0.57	-47%	MYR 0.66	62%	3.26%
AmFirst REIT	Dec-06	MYR 1.00	MYR 0.89	89%	MYR 0.40	-60%	MYR 0.29	29%	1.69%

** AHP was listed in 1989 under Listed Property Trusts and converted into a REIT in 2005. Therefore, 2005 is being used as a benchmark for comparison.*

^ Adjusted for 1-for-1 share split in 2015

Figure 6: Total Shareholders Return since IPO Source: fifthperson.com

AXREIT was the first REIT in Malaysia in 2005, and they have a good track record since its inception, consistently beating other REITs in terms of steady returns. Since becoming a publicly listed company, they have had the best total returns to shareholders over the years. Their modus operandi focuses on stable and resilient assets such as warehouses, industrials, factory assets, and sourcing quality tenants like Nestle, Fonterra, Shopee, Lazada, etc. In recent years, they have shifted their focus to becoming owners of distribution warehouses and

renting to logistic and e-commerce players. A resilient REIT with an excellent management team increases the chances of getting consistent returns for many years to come.

Another REIT that I have invested in and used a different approach is Al-Aqar Healthcare REITs (ALAQAR), another Shariah-compliant REIT with good quality assets and tenants. ALAQAR owns 20 KPJ Hospitals all over Malaysia, Kulim Medical Center and the Jetta Australian Aged Care Center. I bought 400 units of ALAQAR every month when my government wage came in for 24 months. What better match for a doctor than an investment vehicle that owns a chain of hospitals and collects rent from all 22 facilities?

The Bottom Line

As anaesthesiologists, most of our lives are too preoccupied to cope with conventional property investment methods. We are also creatures of habit and often disciplined enough to save money for investing. However, it is challenging to get good investment returns effortlessly without constantly monitoring the stock markets in real-time. Thus, REITs are positioned to be quite suitable for us, as it is a stable form of investment, where prices are not too volatile, and investment ideas are easy to understand. It is also very liquid, as you can buy or sell to the stock market any time the market opens. Of course, you need to start studying more about REITs individually to see which is to your liking before clicking that button to buy! I wish you all the best and Happy Investing!

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Embracing Pashtunwali; Ask What you can do for the World - Part Trois

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When I signed up for this mission, little did I imagine myself to be directly witnessing world history. On 15th August 2021, the Taliban entered Kabul after months of intensive fighting all over the country, marking the end of the Afghanistan government's support by the United States of America (USA). On the 31st August 2021, Afghanistan celebrated its latest independence from foreign forces, this time around the USA, when they formally withdrew 100% of all their military might from Afghanistan.

In early 2020, I was offered to be part of a mission with Medicin Sans Frontiere (MSF) after attending their recruitment and induction programme in Stockholm, Sweden back in 2019. (Who would not want to go there for induction?) However, due to the uncertainty of the pandemic, it was postponed till 2021. Even then, I was not sure whether it would happen as the whole world was struggling with COVID-19.

In July 2021 (with complex immigration permission), I left for Afghanistan when Malaysia was still under the Emergency Ordinance and in total lockdown (MCO 3.0).

I was briefed online about the mission and the security situation extensively by various project coordinators before I left. Since there was a recent protocol change in MSF's flight plan due to security reasons, I only knew I had to fly to Dushanbe, Tajikistan two days before departure. I had issues in KLIA to justify my travel route! My Afghanistan visa was processed in Dushanbe and only then was I ready to leave for Kabul. It was weird travelling during this period as in Malaysia we practised strict distancing and masking measures.

MSF runs long-term projects in the major provinces in Afghanistan, namely Kandahar, Herat, Lashkar Gar, Kunduz and Khost. My mission was in Khost, Afghanistan. This province is situated in the east of Afghanistan bordering Pakistan. MSF has been running a maternity hospital in Khost since 2012 and this hospital serves as the "tertiary" centre for the province. With the conflict that happened, the hospital loosened its admission criteria to ensure access for mothers from all around the region. Hence, cases appearing on our doorstep will never be simple straightforward cases.

A typical mother coming for labour would at least be a young G5! Resuscitating postpartum haemorrhage is common and explains how their blood transfusion services are efficient. At its peak, this hospital handled 2000 deliveries per month for a year! This hospital has a 20 neonatal bed facility but many limitations. One can term the highest support we can provide as just HDU care. There is no ICU bed in the whole of Khost province and if we do need a higher level of ICU care, we have to transfer these patients to Kabul. The maternal and neonatal mortality rate is high and it was a humbling experience seeing all these limitations.

My job description was as an expatriate anaesthetist and critical care physician. Besides ensuring the day-to-day

running of the OT, I supervised the national staff anaesthesia medical officers and was involved in various hospital clinical management matters. The equipment and medication available are basic but suitable in running a tertiary centre in a conflict-ridden country. Anaesthesia management for the cases we encountered here needs one to be on one's toes in applying the basic principles of care. Ketamine anaesthesia and regional anaesthesia are critical skills in this environment. I had the pleasure of using the draw-over type of GA machine - Glostavent; my only exposure before this was in anaesthesia textbooks and my reference before coming here was Youtube!

When I arrived in Khost, it was during the peak of the Delta variant wave. We had several patients and staff in isolation which impaired our human resource availability. We had expatriates who were exposed and later developed COVID-19 symptoms. I was then put in charge of their care in the compound. Thank god that I was giving inputs about the overall clinical management, armed with my previous experience in handling COVID-19 cases in Malaysia. It was fairly worrying for the unvaccinated expatriates even though they were young with no co-morbidities. Two of our expatriates developed moderate COVID-19 disease, and their symptoms worsened.

Constant clinical management discussions were done with the central coordination team and we decided to evacuate the deteriorating patients to Kabul. It was pretty tense because the evacuation helicopter was delayed a few times due to bad weather. It was a relief when we managed to evacuate them as per COVID-19 isolation protocols to Kabul. Imagine me having to wear a complete PPE kit escorting them in a small evacuation plane through Kabul city! It was a timely transfer because after the evacuation, one of the expats needed hospitalization with oxygen therapy and was later flown out of the country due to further complications.

What happened during the takeover period and how I left the country will be a story I will share when you buy me a good cup of coffee. I was stranded in Khost for a few weeks as our initial evacuation plan did not proceed as planned. At that time, nobody could give us answers or a conclusive plan on how will we be evacuated! Ironically, after the Americans left, there was no more fighting. You don't hear gunshots nor gunfights reported when the Taliban has taken over the country. The issue was more of administration in the country's day-to-day running. People were confused on how to run their daily lives without wages and money. It was and still is a trying time for the country.

It was sad leaving Khost though. Working in an unstable environment with limited resources demanded a lot of thinking outside the box. My friendship built with the Afghan national staff was precious. I was totally mesmerized by their act of kindness and brotherhood despite they themselves being unsure of what their future will be. This experience was a once-in-a-lifetime opportunity and will be cherished forever. I pray that I will be able to return to Khost as their friend visiting as a tourist someday.

How Can I Help?

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In the pilot episode of the medical drama series on Netflix called "New Amsterdam", the protagonist Dr Max Goodwin walks into the auditorium and says, "How can I help?" which goes on to become his catchphrase for the entire series. As a budding anaesthetist sharing the burden of the COVID-19 pandemic with the iconic giants in the fraternity, each time I came short of their expectations and was met with their piercing gaze, the only mantra that rang in my ears was "How can I help" and that gave me the strength and confidence to wade through the waves of challenges and self-doubts. Just as the entire nation was trying to bounce back from the unprecedented brunt of the pandemic yet again, we were slapped with another crisis.

On 17th December 2021, following a torrential downpour the country witnessed one of its worst floods of the century. The resulting floods affected seven states across the country which not only displaced thousands nationwide but also strained the emergency services as we were caught unprepared. Many communities were marooned, surrounded by floodwater which abruptly denied them access to essential services such as water, food and healthcare. Hours after the emergency alerts were issued, water levels rose exponentially, driving people to their roofs and the higher levels of their homes. Cars and household possessions were swept away and in many areas, after the water receded, thick mud and muck coated thousands of houses damaging all household content. Many first responders and non-governmental organisations were deployed to these flood-stricken areas to work alongside authorities providing medical relief, food aid and evacuation of victims. One such NGO was Mercy Malaysia which was established in 1999 to provide medical relief, sustainable health-related development and risk reduction activities for vulnerable communities in both crisis and non-crisis situations.

My involvement with Mercy Malaysia started ten years ago during my early training years in anaesthesia in Sabah. I remember being the only anaesthesia trained volunteer then amidst doctors from emergency medicine and dentistry. Every month, we conducted medical camps in remote areas that were not readily accessible. Not to forget was the annual five-day Salt trail expedition which was a route traditionally followed by villagers when taking their produce to the markets on the west coast and returning with salt and other provisions. The Salt Trail involved trekking a gruelling 34 km-long jungle route across mountain peaks, muddy river valleys and through some dense Borneo jungles. This challenging trek-and-treat expedition involved six to eight hours of walking daily to remote villages along the Crocker Range Park providing essential medical screening, dental care, health education and promoting reproductive health to the villagers. My involvement with Mercy Malaysia then did not only allow me to reach out to remote local communities, but it also served as a platform to meet other selfless individuals from non-medical backgrounds with whom I was able to form lasting friendships. As I progressed along with my career, my involvement with Mercy Sabah Chapter ended as I left Borneo to continue the anaesthesia training in peninsular Malaysia. Upon completing my training, my intention to join the Mercy Malaysia HQ in Kuala Lumpur was halted as the entire anaesthesia fraternity was swamped with immense work and unprecedented pressures battling the COVID-19 pandemic.

Only recently during the flood crisis, I participated in their outreach mobile clinic programmes. I witnessed how swiftly Mercy Malaysia pivoted its emergency response to provide much needed aid to the flood victims. According to Associate Professor Dr Shalimar Abdullah, who is also the Vice President III of Mercy Malaysia, during the immediate period of the flood, the team mainly focused on distributing ready-to-eat meals such as biscuits, power bars, bread, canned food, drinking water, sleeping kits and personal hygiene kits to the evacuees at the evacuation centres. Apart from Klang Valley, the rescue effort and aid distribution were ongoing in many other places, including Shah Alam, Kelang, Hulu Selangor and Sepang, followed by Temerloh, Bentong, Segamat and Malacca a week later. Mercy also assisted with repairing damaged water supply infrastructure thus facilitating access to clean water sources where the water, sanitation and hygiene (WASH) facilities were limited.

During the acute phase of the flood crisis, the health care support rendered by Mercy Malaysia in the form of mobile clinics and house-to-house visits were instrumental as the victims had no access to healthcare services due to disrupted transport. It was also imperative to prevent disease outbreaks, especially that of water-borne. At the evacuation centres, we focused on COVID-19 screening, medical examination and provision of medication for non-communicable diseases such as hypertension, diabetes and asthma. As part of a holistic approach to medicine, we also mobilised a team of psychologists to address the psychosocial impact of the flood on the victims where a handful had post-traumatic stress disorder, anxiety and depression. We expect more mental health issues to surface as time progresses when the extent of damages begin to sink into these individuals.

During the recovery phase, our focus shifted onto cleaning and repairs where we mobilised groups of volunteers to clean affected houses and schools. Most of the victims cleaned their houses during the day and returned to their respective shelters only at night as many residential areas did not have water and electricity. Repair kits were distributed to aid the repair of the damaged houses alongside a team of contractors. During this recovery period, there was a shift in the spectrum of diseases seen. I realised most of the victims suffered from skin ailments such as fungal infections, cellulitis and eczema from wading in dirty floodwaters and ulcers from ill-fitting boots and shoes. Some of them needed daily wound dressing as well.

From a volunteer's viewpoint, all I had to do was spare time to lend a pair of hands and listening ears to the victims which I would repeatedly do in a heartbeat. But for Associate Professor Dr Shalimar who wore both a volunteer and a coordinator hat, Mercy Malaysia faced multiple challenges during this crisis. There was a lack of coordination and communication amongst the disaster management units during the immediate phase seemingly attributed to the lack of preparedness. Mercy Malaysia was working alongside the district health office in manning clinics in areas that were designated by them. It was unfortunate that some of these areas were directed to have 12 hours of medical presence, and yet only two or three patients needed treatment for the entire duration, which left many of the volunteers frowning since time was not a renewable resource. The healthcare volunteers comprised doctors and healthcare personnel from both private and public hospitals. Some amateur volunteers from various clinical backgrounds found the mobile clinics to be lacking as they were not accustomed to treating with limited resources. Therefore being tactful and exercising discretion was integral in managing their expectations. Malaysians, in general, were very empathetic towards the plight of the flood victims. Donations in the form of monetary aid, food and clothes came in abundance. However, towards the tail end of the crisis, mountains of clothing donated by well-meaning individuals became rubbish as the flood-stricken families received more than what they required. Both men and women needed innerwear but were put in an awkward position where they could not request it out of modesty. Many more required daily appliances such as kettles and cooking utensils. Nearly everyone required money to repair their cars or motorbikes and their houses. There was a constant debate that the best donation would be in cash instead of kinds.

Despite all the hiccups and challenges faced, we Malaysians certainly had each other's backs. Many benevolent individuals took it upon themselves to render help to their fellow brothers and sisters regardless of their socio-economic background, creed or culture. We all read about the couple who showed admirable tenacity by running a mobile clinic in front of their inundated clinic or about the cardiologist who cycled his way through dangerous floodwaters to get to his patients. There are many other unsung heroes behind the masks who might not have made the headlines. Patients always remember the name of their surgeon, never that of their anaesthetist. Despite our highly sensitive role, we are all but invisible to our patients. Nevertheless, we persevere solely because it is a hugely rewarding job where we make a difference.

I believe your life is not about you; it should be about touching the lives of people around you. Sometimes all it takes is one simple gesture or a random act of kindness to put a smile on someone's face and make them feel less alone. So if you want to make this life count and give back to the community, then ask yourself, "How can I help?"

Anaesthesia and Pain Medicine Training: A UK Experience

by Dr Mohd Aizad Mohd Yusof
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Having had an interest in Anaesthesia early on in my medical career, I did my optional special study module in Anaesthesia in medical school and subsequently a rotation in Anaesthesia and Critical Care during my houseman years (aka Foundation Training). I then went straight into Anaesthesia training and continued my journey into this speciality I am proud to call my own. In this article, I will attempt to give a brief overview of Anaesthesia and Pain Medicine training in the UK and share some of my own experiences.

The Royal College of Anaesthetists at Red Lion Square, London

Anaesthesia training in the UK is structured and is based on a curriculum produced by the Royal College of Anaesthetists (RCoA), the professional body responsible for setting recruitment, training and assessment standards. This is vetted and approved by the General Medical Council (GMC) UK, which overlooks the entirety of postgraduate education and speciality training in the UK. Following Foundation Training, a junior doctor can apply to enter Anaesthesia training via a competitive national recruitment process; if successful, one is usually offered a two- to three-year contract in a regional training area under the care of a 'deanery'. The trainee at this stage is termed a Core Trainee (CT) 1-3 and is initially required to complete a period of supernumerary training prior to undertaking on-call commitments. This is then followed by rotations at a variety of hospitals to ensure sufficient exposure to different anaesthetic and surgical subspecialties, evidenced by completion of training modules as well as a multitude of workplace-based assessments. During these two to three years, the trainee is also expected to pass the Primary Fellowship of Royal College of Anaesthetists (FRCA) examination to progress.

The trainee is then expected to undergo another competitive national selection process to proceed to higher speciality level training in Anaesthesia. If successful, the trainee is usually given a five-year contract in a deanery. This is then termed Specialty Trainee (ST) 3-7, and as the number implies this requires at least another five years of training. In this period, the trainee is expected to complete the FRCA in its entirety in addition to fulfilling the Anaesthesia curriculum requirements, which include rotations at various intensive care units and in regional tertiary centres offering surgical subspecialties such as Neurosurgery and Cardiothoracic Surgery.

In the later years of training, typically between ST6 and ST7, the trainee is also expected to choose a subspecialty interest, i.e. Obstetric Anaesthesia, Paediatric Anaesthesia, Regional Anaesthesia, Pain Medicine, etc. At this stage, trainees may opt to undergo fellowships in subspecialties of their choice subject to the approval of their Training Programme Director (TPD). An exception to this would be trainees who aspire to subspecialise in Intensive Care Medicine (ICM) as they would be required to apply for dual training pathways much earlier on in training. Amongst the Royal Colleges, the RCoA has recently taken the lead role on perioperative medicine and has incorporated this into the UK Anaesthesia training curriculum; subsequently, perioperative medicine is also now available as an advanced year fellowship.

At the end of training, usually following the ST7 year, the trainee is then recommended for a Certificate of Completion of Specialist Training (CCST) and put on the GMC Specialist Register. The trainee will then be eligible to be formally appointed to consultant posts.

My training in anaesthesia was based at the East Midlands deanery, where I spent seven years prior to gaining my CCST in anaesthesia. This involved rotations around secondary and tertiary care hospitals including the local major trauma centre at the Nottingham University Hospitals NHS Trust. In recent years, this deanery has

expanded to involve Leicestershire hospitals to the benefit of the trainees, as the Glenfield hospital at Leicester provides exposure to the Extracorporeal Membrane Oxygenation (ECMO) service. (NB there are a total of seven centres in England offering ECMO to date).

Undoubtedly, all Anaesthetic trainees in the UK would say that the biggest hurdle to completing Anaesthesia training would be the FRCA examination. As this takes form in the Primary and Final FRCA examinations, which are then further subdivided into Primary MCQ, Primary OSCE, Primary SOE (Structured Oral Examination), Final Written, and Final SOE, trainees usually take at least 3 to 4 years to attain the FRCA postnominals. This is considered a high-stake test as trainees require examination success to progress through training and crucially are only allowed a limited number of attempts to do this. In fact, a recent survey revealed that most trainees would go even further to say that preparation and passing the FRCA examination are considered significant life events, at par with weddings and having children. However, there is ample support from deaneries and consultants usually offer examination practice. In addition, there exist highly regarded regional and national examination courses organised by senior trainees. My experience with the FRCA examination was thankfully a short one, and one that has not left me with too many scars.

My advanced training and fellowship year was in Pain Medicine. Over the course of 15 months, I spent time fulfilling the fellowship curriculum requirements set by the Faculty of Pain Medicine (FPM) of the RCoA. This included spending time in closely allied specialities including Neurosurgery, Spinal Surgery, Neurology, Rheumatology, Rehabilitative Medicine and Palliative Care Medicine as well as completing a logbook of consultations and interventional pain procedures performed. I was also required to write case reports as well as passing the Fellowship of the Faculty of Pain Medicine (FFPMRCA) examination (divided into written and viva voce components) in addition to the FRCA. I was fortunate to have had exposure to more specialised areas of pain medicine including paediatric pain, spinal cord stimulation, intrathecal drug delivery service and cancer pain.

As a senior trainee at this stage, I was given my own clinics and theatre lists with a supervising consultant nearby. The primary model of Pain Medicine in the UK is a multi-disciplinary team (MDT) approach; therefore, I was required to spend a lot of time with psychologists, physiotherapists and pharmacists with interests in pain medicine. Some of my clinics adopted a joint approach whereby the psychologist would sit in the clinic with me as the pain physician. Our MDT approach to complex pain consisted of weekly meetings with these allied healthcare professionals where complex cases were discussed and treatment plans agreed upon. We also had a Pain Management Programme (PMP) whereby the pain psychologist and physiotherapist led patient group educational sessions.

Trainee support in UK Anaesthesia training is generally excellent and most house officers would quote this when asked why they would want to go into Anaesthesia in the first place. All theatres lists are directly supervised by a consultant anaesthetist, with more senior trainees being supervised in a more distant manner. This allowed discussion of challenging cases with the senior trainee being encouraged to ask for help, if required.

All anaesthetic trainees are allocated an Educational Supervisor (ES) who must be a consultant anaesthetist with interest in education and training. The role of ES cannot be understated; this is a crucial role to provide support and guidance for anaesthetic trainees and usually takes the form of pastoral care. More formally, they provide structured reports for trainees prior to annual appraisals before progression to the next stage of training is approved by the TPD and a select panel of appraisers. My ES over the whole duration of my training was Dr Jon Davies, a consultant paediatric anaesthetist with a subspecialty interest in burns anaesthesia, without whom I would never have completed my training and whom I am now proud to call my friend. It is precisely this type of non-academic interaction that makes the years of training more enjoyable and of course more bearable in difficult times.

In recent years, there has been more emphasis on the non-technical aspects of training. These include communication skills, organisational thinking, and aptitude. Objectively, these are assessed at least annually based on consultant feedback and multi-source feedback questionnaires. These must be satisfactory for the trainee to progress to the next stage of training. Additionally, unsatisfactory outcomes in any of these domains will require reflective practice and evidence of learning.

In the last decade or so, the RCoA has pioneered and continued to improve on its e-portfolio platform for trainees. The primary role of this platform, now called Lifelong Learning (LLP), is to allow trainees and trainers to record assessments online as well as complete their logbooks. TPDs and supervisors within the deanery will have access to the trainee's e-portfolio which allows ongoing support and annual appraisals. The LLP has now also incorporated CPD functionality allowing consultants to record points for annual appraisals and revalidation purposes. Being someone who had to transition from paper assessments to an electronic format, I personally found the e-portfolio platform a huge benefit to both trainees and trainers.

As trainees progress through stages of training especially in the later years, the cohort tends to get a bit smaller and close bonds are usually forged. I got to know my counterparts better and of course formed friendships through the challenges and rigours of training. In some capacity or another, we continue to keep in touch and in some cases work together in the same department as consultants. With trainees inevitably going into different subspecialties, it also makes life easier when there is someone at the end of the phone to call for advice in tricky clinical or even non-clinical situations.

Have there been any negative aspects to training? One that quickly comes to mind would be the 'uncoupling' of speciality training, i.e. the trainee is required to apply for higher speciality training via a competitive national selection process following a period in CT1-3. Given that the trainee is required to pass the Primary FRCA during this period, it is a significant investment in time and effort as well as a commitment to speciality without any guarantee of progress. The situation is made worse by the reduction in higher speciality training posts over the years, making the speciality more competitive. It is now common to see junior trainees spending another year or two gaining further clinical experience and boosting their curriculum vitae prior to being allowed entry into higher speciality training.

Lastly, trainees approaching the last six months of training would be eligible for consultant applications and interviews, as was the case for me. My experience as a consultant anaesthetist in the NHS was rich with many opportunities to pursue non-clinical interests such as research, academia, or management. I was an advanced life support (ALS) instructor, an ES to Anaesthetic trainees, a medical student tutor at the University of Birmingham, the hospital lead for Chronic Pain Management as well as the National Safety Standards for Invasive Procedures (NatSSIPs), and more recently an FRCA examiner at the RCoA. My colleagues have had the opportunity to pursue their own interests and these are encouraged.

If anyone were to ask me if they should consider pursuing Anaesthesia training in the UK, my answer would be undoubtedly yes. Most have had a very positive experience and I am confident that this will continue. The RCoA is a proactive and supportive Royal College, as evidenced by their recent actions during the pandemic and they take members' feedback seriously. The future of Anaesthesia training in the UK therefore looks bright and promising.

The Walsall Pain Team (pain physicians, psychologist, specialist nurses, medical secretaries, support workers)

If there are any questions or queries regarding Anaesthesia training in the UK, I would be happy to be contacted at mohdaizadmohdyusof@gmail.com.

Meeting the challenges of surgeries after the pandemic

Projections suggest that over **28 million** surgeries worldwide may be cancelled or postponed due to COVID-19.[1]

Globally, if normal surgical volumes were increased by **20%** post-pandemic, it would take a median of **45 weeks** to clear the backlog of operations. Therefore, it is imperative to increase surgical unit turnover and reduce economic costs to sustainably combat this considerable influx of procedures.[1]

For meeting the challenges of surgeries after the COVID-19 pandemic, Suprane (desflurane, USP) could be considered an effective general anesthetic option due to:

- **Faster, more predictable recovery**, including airway protection, ventilation, and earlier postoperative cognitive recovery compared to sevoflurane.[2,-5]
- More rapid emergence vs. sevoflurane, which could result in **potential economic savings** with even a minute or two of time saved per patient.[6]
- **Time to return of protective airway reflexes in overweight/obese patients was faster** and showed less variability with Suprane vs. sevoflurane.[7]
- **Helps optimize surgical unit turnover**, which may reduce economic costs to sustainably help combat this considerable influx of procedures post COVID-19 pandemic.[1,2]

SUPRANE API
PRESENTATION: SUPRANE (desflurane, USP) is a colourless, volatile liquid for inhalation containing 100% desflurane. **INDICATIONS:** SUPRANE (desflurane) is indicated as an inhalation agent for induction and/or maintenance of anaesthesia for inpatient and outpatient in adults and maintenance of anaesthesia in infants and children. **DOSAGE AND ADMINISTRATION:** SUPRANE (desflurane) is administered by inhalation. The concentration of SUPRANE (desflurane) should be delivered from a vaporiser specifically designed and designated for use with SUPRANE (desflurane). The administration of general anaesthesia must be individualised based on the patient's response. **CONTRAINDICATIONS:** SUPRANE (desflurane) is contraindicated in patients: • in whom general anaesthesia is contraindicated. • with known sensitivity to halogenated agents. • with a known or suspected genetic susceptibility to malignant hyperthermia. • with a history of confirmed hepatitis due to halogenated inhalational anaesthetic or with a history of unexplained moderate to severe hepatic dysfunction (e.g., jaundice associated with fever and/or eosinophilia) after anaesthesia with a halogenated inhalation anaesthetic. • SUPRANE (desflurane) is contraindicated for use as an inhalation induction agent in paediatric patients because of the frequent occurrence of cough, breath holding, apnoea, laryngospasm and increased secretions. **SPECIAL WARNINGS AND PRECAUTIONS FOR USE:** Warnings: Malignant hyperthermia (MH): In susceptible individuals, potent inhalation anaesthetic agents may trigger a skeletal muscle hypermetabolic state leading to high oxygen demand and the clinical syndrome known as malignant hyperthermia. Suprane (desflurane) was shown to be a potential trigger of malignant hyperthermia. The clinical syndrome is signal led by hypercapnia, and may include muscle rigidity, tachycardia, tachypnoea, cyanosis, arrhythmias, and/or unstable blood pressure. Some of these non-specific signs may also appear under light anaesthesia: acute hypoxia, hypercapnia, and hypovolaemia. Treatment of malignant hyperthermia includes discontinuation of triggering agents, administration of intravenous dantrolene sodium and application of supportive therapy. Renal failure may appear later, and urine flow should be monitored and sustained if possible. Suprane (desflurane) should not be used in subjects known to be susceptible to MH. Fatal outcome of malignant hyperthermia has been reported with desflurane. Perioperative Hyperkalaemia: Use of inhaled anaesthetic agents, including SUPRANE (desflurane), has been associated with rare increase in serum potassium levels that have resulted in cardiac arrhythmias, some fatal, in patients during postoperative period. Patients with latent as well as overt muscular dystrophies, particularly Duchenne Muscular Dystrophy, appear to be most vulnerable. Concomitant use of succinylcholine has been associated with most, but not all, of cases. These patients also experienced significant elevations in serum creatinine kinase levels and, in some cases, changes in urine consistent with myoglobinuria. Despite the similarity in presentation to malignant hyperthermia, none of these patients exhibited signs or symptoms of muscle rigidity or hypermetabolic state. Early and aggressive intervention to treat the hyperkalaemia and resistant arrhythmias is recommended, as is subsequent evaluation for latent neuromuscular disease. Paediatric Inhalation Induction: SUPRANE (desflurane) is not indicated for use as an inhalation induction agent in children and infants because of the frequent occurrence of cough, breath holding, apnoea, laryngospasm and increased secretions. Use in Children with Bronchial Hypersensitivity: SUPRANE (desflurane) should be used with caution in children with asthma or a history of recent upper airway infection due to the potential for airway narrowing and increases in airway resistance. Maintenance of Anaesthesia in Children: Due to the limited data available in non-intubated paediatric patients, SUPRANE (desflurane) is not approved for maintenance of anaesthesia in non-intubated children. Caution should be exercised should SUPRANE (desflurane) be used for maintenance anaesthesia with laryngeal mask airway (LMA) in children, in particular for children 6 years old or younger because of the increased potential for adverse respiratory reactions, e.g. coughing and laryngospasm, especially with removal of the LMA under deep anaesthesia. Obstetrics: Due to the limited number of patients studied, the safety of SUPRANE (desflurane) has not been established for use in obstetrics procedures. SUPRANE (desflurane) is a uterine relaxant and reduces the uterine-placental blood-flow. (See **PREGNANCY AND LACTATION.**) QT Prolongation: QT Prolongation, very rarely associated with torsades de pointes, has been reported (see **ADVERSE REACTIONS**). Caution should be exercised when administering SUPRANE (desflurane) to susceptible patients (e.g. patients with congenital Long QT Syndrome or patients taking drugs that can prolong the QT interval). Precautions: With the use of halogenated anaesthetics, disruption of hepatic function, icterus and fatal liver necrosis have been reported; such reactions appear to indicate hypersensitivity.SUPRANE (desflurane)may cause sensitivity hepatitis in patients who have been sensitized by previous exposure to halogenated anaesthetics. Cirrhosis, viral hepatitis, or other preexisting hepatic disease may be a reason to select an anaesthetic other than a halogenated anaesthetic. SUPRANE (desflurane) may produce a dose-dependent increase CSFP when administered to patients with intra-cranial space occupying lesions. SUPRANE (desflurane) should be administered at 0.8 MAC or less, and in conjunction with a barbiturate induction and hyperventilation (hypocapnia) until cerebral decompression in patients with known or suspected increase in CSFP. Appropriate attention must be paid to maintain cerebral perfusion pressure. In patients with coronary artery disease, maintenance of normal haemodynamics is important for avoidance of myocardial ischaemia. Marked increases in pulse rate, mean arterial pressure and levels of epinephrine and norepinephrine are associated with a rapid increase in desflurane concentrations. SUPRANE (desflurane) should not be used as the sole agent for anaesthetic induction in patients at risk of coronary artery disease or in patients where increases in heart rate or blood pressure are undesirable. It should be used with other medications, preferably intravenous opioids and hypnotics. During maintenance of anaesthesia, increases in heart rate and blood pressure occurring after rapid incremental increases in end-tidal concentration of SUPRANE (desflurane) may not represent inadequate anaesthesia. The changes due to sympathetic activation resolve in approximately 4 minutes. Increases in heart rate and blood pressure occurring before or in the absence of a rapid increase in SUPRANE (desflurane) concentration maybe interpreted as light anaesthesia. Hypotension and respiratory depression increases as anaesthesia is deepened. SUPRANE (desflurane), like some other inhalational anaesthetics can react with desiccated carbon dioxide (CO2) absorbents to produce carbon monoxide which may result in elevated levels of carboxyhaemoglobin in some patients. Case reports suggest that barium hydroxide lime and soda lime become desiccated when fresh gases are passed through the CO2 canister at high flow rates over many hours or days. When a clinician suspects that CO2 absorbent may be desiccated, it should be replaced before administration of SUPRANE (desflurane). As with other rapid-acting anaesthetic agents, rapid emergence with SUPRANE (desflurane) should be taken into account in cases where post-anaesthesia pain is anticipated. Care should be taken that appropriate analgesia has been administered to the patient at the end of procedure or early in the post-anaesthesia care unit stay. Emergence from anaesthesia in children may evoke a brief state of agitation that may hinder cooperation. As with all halogenated anaesthetics, repeat anaesthesia within a short period of time should be approached with caution. Facilities and equipment for maintenance of a patent airway, artificial ventilation, oxygen enrichment and circulatory resuscitation must be immediately available. **PREGNANCY AND LACTATION:** Due to the limited number of patients studied, the safety of SUPRANE (desflurane) has not been established for use in obstetric procedures. SUPRANE (desflurane) is a uterine relaxant and reduces the uterine-placental blood-flow.There are no adequate data from the use of SUPRANE (desflurane) in pregnant or lactating women. Physician should carefully consider the potential risks and benefits for each specific patient before prescribing SUPRANE (desflurane). Date of revision: September 2019.

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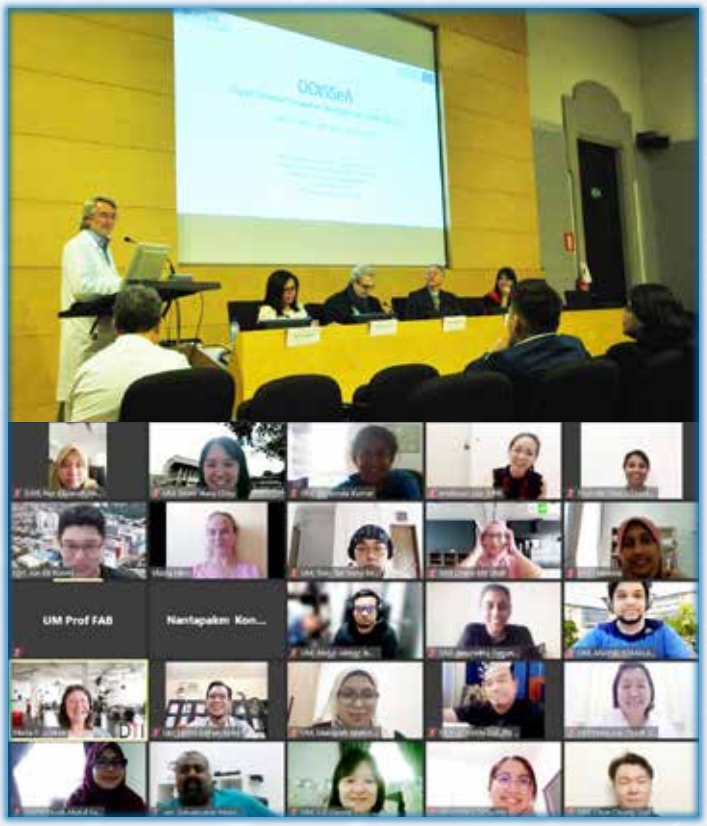
The ODDISSeA Journey
(ODDISSeA: Organ Donation Innovative Strategies for Southeast Asia)

by Dr Yap Mei Hoon
University Malaya Medical Centre, Kuala Lumpur, Malaysia

It started with a phone call and two questions:
Are you passionate about organ donation? (Yes)
Do you want to be a part of something new and exciting? (Of course!)
and the rest is history.

Malaysia, like its Southeast Asian neighbours, has one of the lowest deceased organ donation rates in the world. The Organ Donation Innovative Strategies for Southeast Asia (ODDISSeA) project is a post-graduate programme in organ donation which aims to increase professional competency and boost organ donation activity in the region. Funded by the European Union, it is a strategic collaboration between six universities in Malaysia, Myanmar, the Philippines and Thailand as well as the Spanish Donation and Transplantation Institute together with the University of Barcelona. For the benefit of the uninitiated, Spain currently leads the world in organ donation, boasting a world-renowned model of organ donation and transplantation which has produced impressive deceased donation rates year after year.



The programme kicked off on 7th January 2020, with a total of 296 participants from 4 countries, consisting of doctors from various fields in medicine - anaesthesia, intensive care and emergency medicine, among others. Webinars by local and international trainers covered the intricacies of each step of the organ donation process, namely donor detection, diagnosis of brain death, donor management, family approach for organ donation and finally, organ recovery, preservation and allocation. The Spanish faculty also shared their experience in organ donation after circulatory death, which is well established in Spain and contributes significantly to the number of deceased donors in their country. Besides attending lectures and completing regular online assessments, participants were required to organise awareness activities and produce written reports based on local statistics on organ donation as part of their group projects.

And then the COVID-19 pandemic hit us. Hard. Like everything else planned in 2020, the ODDISSeA programme was disrupted. Participants, many of whom were frontliners, found it difficult to cope with the course schedule. At the same time, trainers were faced with the task of making frequent modifications to the programme's content and format. Lectures were postponed, datelines were pushed back and face-to-face sessions were converted to online meetings. Perhaps the greatest challenge for everyone was to maintain the momentum of the course. It was indeed a proud moment when the pioneer batch of ODDISSeA participants completed the course in October 2021. We could not have done it without the unwavering support of our dedicated trainers as well as our fellow coursemates.

Pre-ODDISSeA, I was a mere spectator of the organ donation process, watching excitedly from the sidelines. Post-ODDISSeA I am now part of that process, sharing my newfound knowledge and skills with my team. May the success of this innovative training programme translate into an increase in deceased organ donation rates in the near future.

Perioperative Dexamethasone Use as PONV Prophylaxis in Diabetic Patients (PADDAG Trial) - Has the Myth been Dispelled?

by Dr Cheah Kean Seng
Tallaght University Hospital, Dublin, Ireland

Postoperative nausea and vomiting (PONV) remain a common side-effect after volatile inhalational induced general anaesthesia. It affects up to 30% of post-surgical patients and 80% among the high-risk group.[1] PONV is also the most common patient dissatisfaction after pain during postoperative recovery. Patients with significant PONV are at higher risks of wound dehiscence, electrolytes imbalance, dehydration, oesophagal rupture and aspiration. In a survey from patients across Europe and America, patients are willing to pay an extra $50-100 from their wallet to eradicate PONV.[2] Unexpected overnight hospitalisation, delayed hospital discharge in ambulatory surgery, increased resource utilisation and higher medical costs in health care[3] are some of the economic repercussions of PONV. Delayed oral intake is the primary concern of PONV in the diabetic patient in particular due to delays in Insulin commencement.

What is Dexamethasone? Simply put, it is a synthetic glucocorticoid commonly used as a first-line anti-emetic agent. The recommended dose of Dexamethasone is 4-10mg for adults and 0.15-1mg for children. It is advisable to administer Dexamethasone at the onset of surgery due to a prolonged lag time and its anti-emetic effect only apparent two hours after administration. To date, no studies have been done on the precise duration of action of Dexamethasone thus far, but 24 hours was generally accepted as the norm.

Prevalance of Risk Factors	
Female	82%
Non-smoker	81%
Previous PONV or motion sickness	55%
Anticipated post-op opiates	78%

Baseline Risk Score (APFEL Score)	
Number of Risk Factors	Baseline PONV Risk
0	10%
1	20%
2	40%
3	60%
4	80%
Patients with APFEL score 0 or 1 were excluded in this trial	

Figure 1: (Source: The Bottomline)

The mechanism of action by Dexamethasone in PONV is not fully understood. Few explanations suggest its anti-inflammatory effect on the gastrointestinal tract, activity on the solitary tract nucleus, interaction with the neurotransmitter Serotonin, or decreased consumption of opioids. It works independently from other classes of anti-emetic, so it is common practice to use in combination with different groups of drugs.

How effective is Dexamethasone as an anti-emetic agent? A single dose of 4mg Dexamethasone reduces the relative risk of PONV by 25% and the number needed to treat (NNT) by four. Apfel et al.[4] have stratified the risks of PONV based on several factors (Figure 1).

The Fourth consensus guidelines for the management of PONV published in 2020 recommend using two anti-emetic agents in patients with two risk factors and three to four agents if more than two risk factors are present.[5]

Traditionally, physicians were conservative in prescribing Dexamethasone to diabetic patients due to the perceived risk of steroid-induced hyperglycemia and infection. In contemplation, is this practice just an archaic fallacy or a myth? Author Tomás B Corcoran recently published a randomised controlled trial on **Perioperative ADministration of Dexamethasone And blood Glucose concentrations in patients undergoing elective non-cardiac surgery (PADDAG trial)**.[6] A total of 302 adults (diabetics vs non-diabetics) were scheduled for elective, non-cardiac and non-obstetric surgery under general anaesthesia and were randomly assigned to receive either 4mg, 8mg Dexamethasone or placebos administered intravenously after induction. The maximal blood glucose level within 24 hours of surgery and its relationship with glycosylated haemoglobin (HbA1c) were taken as the primary and secondary outcomes.

What did we find? The administration of 4mg or 8mg Dexamethasone did not induce hyperglycemia in a non-diabetic or well-controlled diabetic receiver. A significant rise in blood glucose was only seen in receivers with poorly controlled diabetes if given a high dose of Dexamethasone (8mg). There seems to be a correlation that is predictable in this subgroup. Thomás found that for every 1% increase from baseline HbA1c, the blood glucose rose by 4mmol/L.

Is the outcome from this trial consistent with literature worldwide? It appears so, as Tien et al. found no correlation between blood glucose levels and Dexamethasone administration in the post-surgical patient.[7] In one meta-analysis of all RCTs, patients who received Dexamethasone at different doses (4mg vs 8mg) and single vs combination with other classes of anti-emetics experienced a reduction in 24 hours PONV compared to placebo. In a direct comparison between the 4mg vs 8mg arm, no clinical advantage was seen in either receiver.[8] However, high dose Dexamethasone confers a better analgesic profile in post-op patients, but no similar benefit is seen in PONV prevention.

The next question in mind; what about the perceived risk of infection associated with Dexamethasone? A meta-analysis from 56 trials across 18 countries failed to demonstrate an increased risk of infection due to Dexamethasone in elective non-cardiac surgery.[10] Vuorinen et al. conducted a case series study in total hip and knee arthroplasty populations which showed no difference in infection rate between Dexamethasone vs non-Dexamethasone receivers (1.1% vs 1.0%, p=0.773).[9] The author concluded that although diabetic patients were at higher risk of infection post-op in general, this complication was not primarily due to a single dose of Dexamethasone,[9] strongly suggesting that infection after surgery is multifactorial and certainly not attributed to a single dose of Dexamethasone.

Looking at the evidence so far, we can conclude that it is safe to use Dexamethasone for a patient with diabetes. A single dose of Dexamethasone is unlikely to cause significant hyperglycaemia and infection after surgery. Having said that, we should be cautious by avoiding high-dose Dexamethasone in poorly controlled diabetics. A single dose of 4mg Dexamethasone is innocuous; the apparent benefits outweigh the risks thus far.

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Anaesthesiology Updates (AU) 2022 and Webinars in Neuroanaesthesiology (WiN) 2022 Series: A Humble Beginning

by Dr Chan Weng Ken
Hospital Umum Sarawak, Sarawak, Malaysia

> *Once you stop learning, you start dying*
>
> **- Albert Einstein**

Quoting from Miller's Anesthesia, 9th edition, "Anesthesia is fundamental to the overall practice of medicine worldwide". The advancement in anaesthesiology has enabled more sophisticated operations on patients with more complex conditions. The change in our local anaesthesiology landscape has promoted the emergence of neuroanaesthesiology and neurocritical care subspeciality. This subsequently led to the inception of the Malaysian Society of Neuroanaesthesiology and Neurocritical Care (MSNACC) in 2021.

True to Einstein's saying, there is a need to provide continuous medical education (CME) and updates to currently practising perioperative physicians in the field of neuroanaesthesiology, neurocritical care and topics that are closely related. The COVID-19 pandemic has enabled the rapid embracement of digitalization among health care physicians and paved the foundation for virtual CMEs. In collaboration with *Persatuan Kakitangan Anestesiologi Hospital Umum Sarawak (PEKA-HUS)* locally and other international faculties, two main webinar series were organised, namely Anaesthesiology Updates 2021 (AU 2021) and Webinars in Neuroanaesthesiology 2021 (WiN 2021).

The AU 2021 series was jointly organised by *PEKA-HUS* and the University of Washington (UW), Seattle, United States of America. These were quarterly webinars that were held on 28th March, 30th May, 19th September and 7th November 2021. Professor Dr Deepak Sharma (UW) and Dr Peter Tan (HUS) were the programme coordinators. The theme for AU 2021 encompassed topics related to subspecialties in anaesthesiology, pain medicine, patient safety, and research delivered by UW speakers.

The WiN 2021 series was a collaboration between the Special Interest Group (SIG) in Neuroanaesthesia, College of Anaesthesiologists, Academy of Medicine of Malaysia; MSNACC and *PEKA-HUS*. It had three themed symposia, which were Neurovascular Anaesthesia (24th April), Paediatric Neuroanaesthesia (19th June) and Perioperative Neuroprotection (23rd October). The panel of faculty was more inclusive in this series, ranging from the United Kingdom, Asia-Pacific as well as the locally renowned speakers representing the SIG-MSNACC.

Both AU 2021 and WiN 2021 series received overwhelming responses from the anaesthetic fraternity nationwide. As we continue with the new norm of medical education, SIG-MSNACC and PEKA-HUS are looking forward to a more exciting series of AU and WiN in 2022 as well as the upcoming Neurocritical Care Conference on 1st - 3rd July 2022.

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Full prescribing information is available upon request.
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Organ Procurement Experience in Hospital Seberang Jaya, 2021

by Dr Nor Hidayah Zainool Abidin
Hospital Seberang Jaya, Pulau Pinang, Malaysia

Amidst the COVID-19 pandemic, work was so demanding due to the imbalances in managing COVID pneumonia and non-COVID patients simultaneously. Life in the Intensive Care Unit (ICU) was hectic with non-stop referrals while Operation Theatre (OT) cases became cramped with many backlogged cases.

During this time, anaesthetists and medical officers are a valuable commodity and are in high demand. Paramedics are being allocated to other places to cater to increasing COVID cases and critical care patients. Patients needing surgeries also require strict patient screening and SOP for every procedure.

Down with this overwhelming task, we shall never forget the value of frontliners who serve the people and the country. The oath we took as medical practitioners reminds us that every patient's life is our utmost priority and we are to always ease the pain to elevate one's discomfort.

On one weekend in October 2021, a gentleman was given a noble contribution to the gift of life. Even at the end of our life, life can even be valuable after death. There is a saying that goes "Life springs from death, sorrow turns to hope, and a terrible loss becomes a gift". We would not know what is waiting for us in our life's path. We can only pray that God will allow us to do good deeds even at the end of our lives. I cannot hold back my tears knowing how God had created the best path for this patient after he had a motor vehicle accident a day ago resulting in a severe brain injury.

That evening, when his family members informed the primary team that the patient had wished during his childhood to donate his organs, their prompt action in informing the anaesthesia medical officers was one of the best things that happened in terms of facilitating organ donation and activation of tissue and organ procurement (TOP) team.

In the middle of the night, we urgently reviewed the patient who was ventilated inside the ward. Hypotension, metabolic acidosis and electrolyte imbalances are expected as the consequences of possible brain death. With ICU full almost all the time, the need to accommodate for possible organ donor patients became one of the priorities of the on-call critical care team and was done with the greatest care and respect. They were consulting the Hospital Seberang Jaya (HSJ) TOP team group led by Dr Halimatul Nadia and her assistant, Dr Mohd Fekri, to gain more insight and information and the steps needed. This was followed by subsequent well-planned progress by HSJ TOP Team.

Proceeding with all the procedures for potential organ donation is not an easy task. We had one experience of an almost similar case, but unfortunately, it was complicated with septic shock, difficult ventilation with hospital-acquired pneumonia (HAP), medico-legal issues in addition to the complexities of organ donation during the COVID pandemic. The hard work seems tiring but still, to do this noble job, one must never forget that it takes blood, sweat and tears to make it successful. Including this case, we have had two TOP team activations for this year. I would like to quote this sentence by Dr Mastoura, 1998 "Saving lives is a core moral principle in medicine; in fact, the principle of beneficence holds that physicians ought to find ways either to save the lives or to improve the quality of life of their patient with organ failure. One ought to work hard to the best of our capability to help the patients and to make the wish of this selfless deceased donor come true. It is ethically unacceptable to ignore the plight of patients who could be saved".

Many citizens may wish for their organs to be donated after death. They would gladly donate their organs for truly humanitarian and altruistic motives. Yet in Malaysia, we must pledge for organ donation which would ease organ preservation and organ procurement. Some countries use the concept of *'presumed autonomy'* where all the citizens above 18 years old are presumed to consent for organ donation unless they dissent. Some may have better health improvement from tissue and cornea transplants. However, our country may need to embrace the efforts of promoting public awareness for organ donation to make people realize that organ donation is life-changing especially to the person and family who are at the end of their hope. It will affect the donor and the

recipient and the family, relatives, and the whole community who benefit from the improvement of the health and life of the recipient.

Getting involved in managing the potential donor for organ sustenance for the brain death test is a laudable effort and learning opportunity for medical officers, nurses, anaesthesiologists, surgeons and physicians. We had to overcome various challenges associated with organ sustenance and the decision for ICU admission, which has a very tight availability in the middle of the night. In addition, some other issues like family matters pre- and post organ procurement may also arise during this process which becomes part of our responsibility to help to ease the family burden.

With a group of young doctors and staff learning the experience of organ procurement

We are all on the learning curve taking every opportunity to be better day-by-day. Indeed, it feels like an honour to support the effort to make a 'gift of life' successful especially working together with the TOP team of Pulau Pinang Hospital and National Transplant Resource Centre (NTRC), Hospital Kuala Lumpur.

The brain death test was done at 9.40 am and the second test was done six hours later. A confirmatory test was positive and brain death was declared. At 12.30 midnight, the donor body was brought to OT when everyone was ready, preparation was done until 1.00 am and surgery started at 2.00 am. Ventilation was later switched off once the liver blood supply clamping was ready. Subsequently, the liver and kidneys procurement was done until 4.30 am by the efforts of six surgeons, three anaesthesiologists, medical officers and supporting staff.

The operating theatre is like a holy synagogue when the person going inside there will give the gift of life *'Anugerah yang tiada ternilai'* to so many unfortunate patients with end-organ damage. Those involved in organ procurement make time and effort from far, while hospital staff spend extra time reviewing and managing to make the whole process as smooth and effective as possible. The ICU staff is effective in preparing the donor body, all the way to the *"last office"* preparation while waiting for the whole TOP team to come and get ready. All are considered as the noblest charitable work worth to be mentioned.

Being an irregular experience for organ procurement, the step-by-step intraoperative experience can be unfamiliar to anaesthetists and OT staff. However, cooperation and sharing of knowledge and experience between anaesthetists and surgeons to anaesthetists are beneficial. Teamwork included medical officers, nurses and supporting staff was at its best acknowledging all information and sharing and willingness to listen and follow is most appreciated in making communication successful. Proper team updates make managing hiccups from various hurdles and troubleshooting much easier. The next day was brightened by knowing that successful organ transplants were done to three recipients in Selayang Hospital, Selangor.

It becomes a collective duty to cooperate with each other and achieve this goal of treatment and healing towards righteousness. *'Whosoever saves a life; it would be as if he saved the life of all mankind'* (The Holy Quran 5:32).

Hopefully, this experience will help strengthen the HSJ teamwork with the TOP team throughout Malaysia in facilitating the noble duty to help the community. Success is never an accident. It is hard work, perseverance, learning, sacrifice and most of all, love of what you are doing and learning to do.

Special Acknowledgement
Anaesthesia ICU and OT staff, Neuromedical team, Surgical team HSJ and Sultanah Bahiyah Hospital and Seberang Jaya Hospital Director, TOP team General Hospital Pulau Pinang and National Transplant Resource Centre (NTRC), HKL.

Paediatric Anaesthesia Meeting (PAM) 2021 - Doing it Right!

by Dr Sivaraj Chandran
Hospital Tengku Ampuan Afzan, Kuantan, Pahang, Malaysia

Paediatric Anaesthesia Meeting (PAM) was organised virtually on 23rd and 24th October 2021. This event was organised by the Malaysian Society of Paediatric Anesthesiologists (MSPA), headed by Dr Hamidah Ismail, as the organising chairperson. The aim of this event was to promote and educate the anaesthesiologists to deliver the highest standard of professional service pertaining to the field of paediatric anaesthesia. PAM was a collaborative effort by all the paediatric anaesthesiologists in the country, both from the public and private sectors.

This event was graced by Deputy Director-General of Health (Medical), Ministry of Health Malaysia, Dato' Dr Asmayani Khalib. She congratulated the MSPA for organising this event to promote knowledge and awareness, highlighting the importance of patients' safety and delivering quality healthcare.

Apart from the experienced paediatric anaesthesiologists of the country, many internationally renowned speakers participated in this event, namely Dr Josephine Tan and Dr Lee Syu Ying from Singapore, Professor Dr Manoj Kamakar from Hong Kong, Associate Professor Dr Justin Skowno from Australia, Dr James Bennett from the United Kingdom, and Professor Dr Shou-Zen Fan from Taiwan.

Various exciting topics were discussed in detail, such as the advances in paediatric haemodynamic monitoring, common challenges in paediatric anaesthesia practice such as dealing with an obese child, neuroprotection in paediatric anaesthesia, emerging pharmacology in paediatrics, airway and ventilation issues including cannot intubate and cannot oxygenate (CICO) scenarios, lung protection strategies during lung resection, apnoeic oxygenation and the role of ultrasound in airway management. Other lectures that were covered included providing anaesthesia for special groups of children, the child with OSA going for daycare, the child with emergence delirium, septic child, and anaesthesia for liver transplants. Pain management lectures included advances in paediatric regional anaesthesia, updates regarding coagulopathy and thrombocytopenia for paediatric regional anaesthesia and chronic pain in paediatric surgical patients.

We were honoured to have Dato' Dr Zakaria Zahari, Senior Consultant Paediatric Surgeon & Head of Paediatric Surgery Service, Ministry of Health, Malaysia, as a guest speaker giving a talk on the "Septic Child" and "The Golden Hour". It was indeed an enjoyable experience to know from the surgeon's point of view.

Pain management is an integral part of peri-operative care for paediatric patients going for surgery. We were fortunate to have input from Dr Ahmad Afifi Mohamad Arshad, Consultant Pain Specialist from Hospital Sultanah Bahiyah, Alor Setar, discussing the incidence and prevention of chronic pain in paediatric surgical patients.

On top of the interesting lectures, two other thought-provoking forums gained excellent responses from the participants. The first forum held on 23rd October 2021 on the topic of Crisis Management "Help: The Baby is Blue" moderated by Dr Nur Hafiizhoh with senior expert panellists Dr Thavam, Dr Intan Zarina, and Dr Ruwaida Isa discussed various practical approaches to dealing with a cyanosed child. It was an eye-opening session as we could learn straight from the experts' point of view. The second forum was held on the following day titled "Doing It Right: Pearls from the Expert", moderated by Dr Foo Sze Yuen with the senior experts of the fraternity, Professor Dr Felicia Lim, Professor Dr Lucy Chan, Dr Sushila Sivasubramaniam, and Dr Hamidah Ismail. The experts shared their experience in dealing with various clinical issues and crises that we often encounter in daily practice. It was indeed a very enlightening session to see all the 'sifu' in the field of paediatric anaesthesia together in one platform and learn from them.

Despite the COVID-19 outbreak and technical difficulties, MSPA managed to organise such an outstanding PAM that has received excellent reviews and feedback not only from participants but also from the overseas fraternity. As "small players in the big world", we aspire to spread further knowledge and training to all the anaesthesiologists to be skilled and competent in dealing with paediatric anaesthesia.

To get further updates regarding MSPA activities, kindly visit our MSPA website at http://mspa.my and feel free to join as a member to get discounts on your registration. On a side note, MSPA has taken the initiative to publish our own local Paediatric Anaesthesia Handbook written by our practising Malaysian Paediatric Anaesthesiologists. It is free of charge and can be downloaded from the MSPA website.

My Passion for Art

by Dr Anastasia Agusto
Hospital Queen Elizabeth, Kota Kinabalu, Sabah, Malaysia

"Art is not what you see, but what you make others see" - Edgar Degas

Hello everyone! I am Anastasia Agusto, a native-born Sino-Kadazan residing in Sabah, Borneo. I am a part-time calligrapher and resin artist specializing in ocean-inspired resin art. I do all my tinkering from my humble little home studio. I am a doctor by day (sometimes at night) working in the Anaesthesiology and ICU department in Queen Elizabeth Hospital, Sabah. Mostly, I am a full-time mother to a four-year-old boy and two overly excitable pups named Panda and Posy.

I have spent most of my life in coastal Borneo and a portion of it in Melbourne, Australia. My work is very much influenced by the cultures and landscapes of these two beautiful places.

Growing up in coastal Borneo, I draw inspiration from the white sandy beaches of Sabah. I hope that creating ocean-inspired pieces will raise awareness on beaches, oceans and their inhabitants' conservation. To that end, I do my part by recycling all my tools and reusing them to prevent wastage, creating timeless pieces that will adorn homes for ages to come.

Art, to me, is something undefinable. What I want my art to show you is a piece of myself. My journey in art started when I was a junior doctor. I had learnt brush and pointed-pen calligraphy from a visiting workshop and had a lot of time experimenting to occupy my time whilst my husband was away in University of Malaya for his doctorate programme. What started off as a pointed-pen and brush calligraphy hobby soon evolved into a part-time business; writing custom event place cards, designing wedding cards, creating customized mugs/gifts, and designing wedding signages. Over the years, I have joined many artisans' markets (namely Jesselton Artisan Market) and have taught modern calligraphy workshops to numerous students all over Malaysia, sometimes to tourists.

While I was on my maternity leave, I was enchanted by the beauty of ocean-themed resin arts created by international artists on social media. This kicked off an almost frenzied research online on how to create these exquisite pieces. I usually did my research whilst breastfeeding or when the baby was asleep. The experiments started off in a humble little garage of my rented home (sometimes at my in-laws' garage), and I recall having to crouch and pour resin on the floor, often resulting in backaches at the end of the day. When I eventually saved enough funds from work, I built a small home studio where I could work more comfortably. After some time, this evolved to become The Glass Studio KK, where I host workshops for myself and other local artists. It became not just a place of creation but also a place to cultivate creativity and enrich lives.

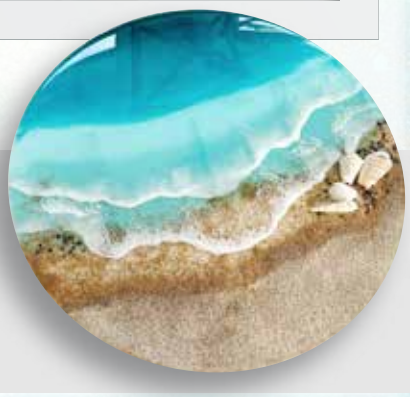
On social media, I go by the name Ana Agusto and have gathered followers locally and internationally. I have collaborated with local and international brands, like writing custom cards for Coach Malaysia and creating ocean-inspired soap dishes for Luma Hotel.

Professionally, I am now in the second year of my doctorate programme, training to become an

anaesthesiologist. Understandably, I have taken my artistic endeavours down a small notch to focus on my training. I am, however, still offering commissions whenever I have some time to spare and use art as a creative outlet to decompress and gain a fresh perspective.

I hope to be able to create a more holistic environment for my child at home and to cultivate creativity and curiosity through my work.

"Don't worry about how you "should" draw it, draw the way you see it" - Tim Burton



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Experience in Postgraduate Diploma of Regional Anaesthesia & Analgesia University of Montpellier (France)

by Dr Navin Durairatnam
Thomson Hospital Kota Damansara, Selangor, Malaysia

I have always been interested in regional anaesthesia from the early days in the Masters Programme. I had have to say that initial interest was inculcated by Dr Loy Yuong Siang. His passion for the subject and keenness to teach, matched with his skill set, made it a very intriguing subject to me. Unfortunately, I did not pursue it with the same kind of vigour that he had shown. However, I had the opportunity to pursue it further once again in 2019 when I stumbled across the Postgraduate Diploma of Regional Anaesthesia and Analgesia.

The Postgraduate Diploma of Regional Anaesthesia and Analgesia is delivered by the University of Montpellier (France) in partnership with the Faculty of Medicine of the University of Korea in Seoul, Korea and the VinMec International Hospital in Hanoi, Vietnam. The programme has been running in some form for over 10 years and has been based in Hanoi and Seoul in the last few years. The diploma is recognised in Europe which garnered interest from many different regions of the world. It was a great experience meeting different nationalities and discussing the differences in our anaesthetic practice.

VinMec Hospital


Korea University

The fact that it was being held in Hanoi was perfect for me since it is quite a short flight away. Upon receiving the course outline, I realised that I would need to travel to Seoul too. It was, after all, a collaboration between the University of Korea and VinMec Hospital. It was an excellent opportunity to visit both places though, and thus I signed up. I found out later that I was not the only one visiting both places for the first time. Particularly nice was that it snowed in Seoul when I was there.

The diploma is held over four separate weeks, two weeks in Hanoi and two weeks in Seoul. The second week in Seoul is meant as the exam week. There are many lectures held in the mornings covering the basics as well as advanced knowledge in regional anaesthesia. The afternoons are then used for live skill sessions to hone the knowledge learnt in the earlier part of the day. The lecturers come from all over the world and include some of the biggest names in regional anaesthesia today. The likes of Xavier Capdevila, Oliver Choquet, TVS Gopal, Manoj Kamarkar, Vicente Rocques are at the forefront of research and innovation in regional anaesthesia. To have them as part of the faculty was an amazing experience. If you have not already done so, do visit Vicente Rocques YouTube page on regional anaesthesia. It is superb. The principal course conductor is Dr Phillips Macaire, well-known worldwide as an excellent regional anaesthetist. He is currently leading research papers in ESP blocks for open heart surgery - TAKK! All who have met him will know.

I found the course outline, presentations, lectures and hands-on teaching to be of the highest standards. I also felt the course structure and duration of one-week stints to be very suitable for someone like me. I feel many of you would find it the same too. Each participant is also required to spend a week doing a clinical attachment with one of the lecturers at their respective hospitals. This is

another highlight of the diploma as one will be able to hone one's skills further in a real-world setting. I also think it is advantageous to experience how anaesthesia is practised in other parts of the world. I had chosen to go with Dr TVS Gopal at the Hyderabad Care Hospital. Every day he would ensure that I experienced several regional anaesthesia techniques. The team was very accommodating. I actually did learn a lot about anaesthesia techniques outside of regional anaesthesia as well. It is always good to see what other anaesthesiologists practise outside of Malaysia. I am glad to state that Hyderabad briyani is indeed delicious. Just be careful of crossing the road. I chickened out and took the auto and immediately became the butt of the orderlies jokes.

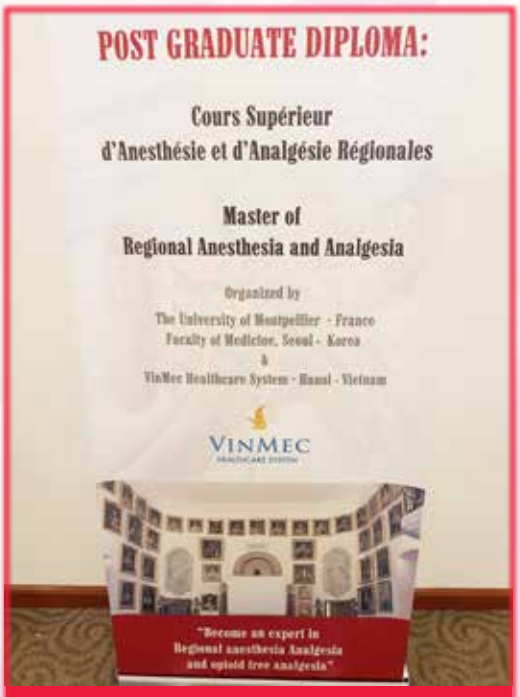
Skill station

An interesting advantage of doing the course in 2019 became apparent when the COVID-19 pandemic came about. With many anaesthesiologists worldwide advocating regional anaesthesia for surgeries during the pandemic, I found myself being extremely glad that I have completed the course beforehand. It was indeed a very advantageous skill set to have. The move towards reduced opioid use and even opioid-free anaesthesia has further made regional anaesthesia an essential skill for anaesthesiologists.

I have no hesitation in recommending the Postgraduate Diploma of Regional Anaesthesia and Analgesia to anyone interested in regional anaesthesia. Even those who may not find regional anaesthesia interesting can consider the course. You may return as a regionalist. I have found a new vigour for regional anaesthesia. I must also thank our local regional gurus especially Drs Shahridan Fathil, Amiruddin Nik Mohamed Kamil and Ramanesh Mageswaran, who I frequently seek out when I need guidance. They are incredibly skilful and freely share their knowledge and experience.

Despite this being all about regional anaesthesia, I have a newfound respect for nitrous oxide - pm for details. Course details are available from medinfusion.org or email katebompas@gmail.com

I may be reached at navin.durairatnam@gmail.com.



Course banner

Malaysian participants with course coordinator

Case Report of a Rare Complication of Retrobulbar Haemorrhage Post General Anaesthesia for Non-Ocular Surgery

by Dr Cheah Kean Seng
Tallaght University Hospital, Dublin, Ireland

Consent has been obtained from the patient for publication of this case report.

Abstract

We encountered an unusual complication of general anaesthesia in which the patient developed an ocular complication from a non-ocular surgery. We noticed a sudden onset of left periorbital swelling after flexible ureteroscopy. Urgent CT orbit confirmed the diagnosis of a left-sided retrobulbar haematoma. We closely observed the patient to monitor for the possibility of progression to orbital compartment syndrome. The patient remained asymptomatic and, fortunately, the swelling subsided with conservative management. It has been brought to our attention that many similar complications have been reported in the literature.

Case Description

A 70-year-old female with a history of left breast cancer in remission for nine years had undergone flexible ureteroscopy to investigate haematuria. Using a Mcgrath laryngoscope, she was intubated with an endotracheal tube size 7.5mm. The surgery was done in a lithotomy position and the head in a central position. The surgery went well and was completed within one hour. On return of airway reflexes during emergence, she had a few mild coughs and was extubated successfully.

In the recovery bay, she developed unilateral left eye proptosis and periorbital swelling. She denied pain in the eye or a change in her vision. An urgent computed tomography (CT) of orbit reported a retrobulbar haematoma with a size of 2.4 x 1.2 x 1.4cm. The haemorrhage is intraconal and focused on the superolateral quadrant - the resultant mass effect causing proptosis and inferomedial displacement of adjacent extraocular muscles and orbital nerve. Assessment from the ophthalmology team did not show any change in vision or high intraocular pressure (IOP). There was no obvious abnormality in the blood count or coagulation profile. The patient was treated conservatively and was monitored for worsening progression. The following day swelling subsided but a small subconjunctival haemorrhage can be seen on the lateral part of the left eye *(Figure 1)*.

Clinically she remained asymptomatic with no change in her vision. A follow-up review from the ophthalmologist did not show any worsening eye signs. The patient was discharged well.

Figure 1: Left subconjunctival haemorrhage post-op day one

Discussions

Ocular injury following non-ocular surgery is extremely rare with an incidence of 0.056% reported from a survey between 1988 to 1992.[1] Specific causes can be identified only in 21% of the cases.[1] The most common complication was corneal abrasion whilst the least was complete blindness. Although rare, it is associated with significant monetary settlement compared with claims against non-ocular injuries.

Orbital haemorrhage happens due to spontaneous rupture of vasculature around the eye. Some patients are particularly at high risks, such as the elderly, hypertensives, diabetics, and patients with coagulation disorders or on anti-platelets. Patients often could identify the trigger like bouts of coughing, straining or weight lifting before the incident. In another subgroup of patients (congenital or acquired vascular anomalies), the haemorrhage could occur even from trivial events and it is

not uncommon if they could not recall the trigger. The fragile vasculature is at risk of rupture from venous congestion or a sudden increase in venous pressure from the Valsalva manoeuvre. During the Valsalva manoeuvre, the venous pressure increases following a rise in intra-abdominal pressure. Since orbital veins do not contain a valve, this can easily lead to overpressurisation and rupture.

Five case reports of ocular haemorrhage after general anaesthesia have been reported in the literature so far (Table I). One similar case report on retrobulbar haemorrhage was dated back in 1987 after removing a chicken bone from the pharynx and likely attributed to thrombocytopenia.

Table I: Summary of case reports on orbital haemorrhage

Author	Patient background (Age/Gender/ Co-morbids)	Complication	Procedure	Aetiology / Treatment
K.E.J Gunning et al.[2] Case report 1987	51 year old, female Systemic lupus erythematosus	Retrobulbar haemorrhage	Removal of chicken bone from pharynx under general anaesthesia	Aetiology: Thrombocytopenia Treatment: Conservative management
K.K Anderson et al.[3] Case report 1994	72 year old, female Arthritis and previous history of CVA	Orbital haemorrhage	Hand arthroplasty	Aetiology: No known aetiology Treatment: Conservative management
Kerry E Hunt. et al.[4] Case report 1998	74 year old, female Healthy	Subperiosteal haemorrhage in the non-operated eye (right/non-operated eye)	Left eye phacoemulsification, lens implantation and trabeculectomy	Aetiology: No known aetiology Treatment: Conservative management
Jon B Obray et al.[5] Case report 2002	67 year old, female Oesophagal reflux, previous history of deep vein thrombosis	Subconjunctival haemorrhage	Decompressive laminectomy	Aetiology: Uncertain. Likely secondary to systemic hypertension or prone position Treatment: Conservative management
H.N Saeed et al.[6] Case report 2014	51 year old, female Stage IV liver cirrhosis, oesophagal varices and thrombocytopenia	Subperiosteal haematoma	OGD and banding of oesophagal varices	Aetiology: Thrombocytopenia Treatment: Orbitotomy and drainage of the haematoma

Retrobulbar haemorrhage is usually caused by trauma to the face and orbit or following surgery (maxillofacial or eye). Of late, ocular haemorrhage caused by retrobulbar block has been increasingly reported due to the increasing number of regional anaesthesia being performed. In non-traumatic retrobulbar haemorrhage, a report suggests that 90% of the cases were related to ocular vascular malformations, 11% due to hypertension, coagulopathy or Valsalva manoeuvre. No precipitating factor can be found in 5% of the cases.[7]

The concern regarding ocular haemorrhage is the risk of vision loss in patients which is very debilitating. Vision loss can happen through direct compression of the optic nerve, retinal artery occlusion, or compression of vessels feeding the optic nerve. The formation of haematoma within a confined eye socket could increase intra-orbital pressure (IOP), causing orbital compartment syndrome. It has been suggested that the rise of pressure by just 3-6mmHg above normal is sufficient to compromise the blood flow to the optic nerve.[8] So there should not be a delay in referral for urgent ophthalmology evaluation.

Both CT and MRI of the orbit are essential to confirm the diagnosis, assess the lesion, and guide decompression if surgery is indicated. CT orbit is commonly the first line because it is readily available and rapidly done. CT is superior in visualising bony structures. In turn, MRI orbit can provide a better picture of vasculature than CT. However, MRI safety and time consumption could be the limiting factor against its use, especially when we are racing against time to decide on intervention.

Mild retrobulbar haematoma can be managed conservatively, mainly focusing on stopping haemorrhage progression and lowering the IOP. Such as:

- Avoid coughing or straining
- Maintain normotension
- Elevate the head of the bed to at least 45°
- Correction of coagulopathy

In the presence of raised IOP, medication can be used to reduce the pressure such as:

- Decrease IOP: Osmotic agent (Mannitol)
- Decrease aqueous humour production: Beta-blocker (Timolol), Carbonic Anhydrase inhibitor (Acetazolamide)

There is also evidence to suggest the use of steroids for their anti-inflammatory and anti-oxidant effects in treating optic neuropathy.[9] Steroids stabilise the cell membrane against ischaemic damage by reducing inflammation. If all other measures fail, lateral canthotomy (exposure of lateral canthal tendon) and cantholysis (plus incision of inferior branch of the tendon) can be performed by the surgeon aiming to relieve orbital compartment syndrome.

In the end, we could not identify the obvious triggering factor that caused the retrobulbar haematoma in this patient. One possible explanation by the ophthalmologists was that probably there was an undiagnosed vascular malformation of the eye that ruptured with minimal bucking or coughing on emergence. Reassurance and explanation were given to the patient before discharge. We have also included an alert sticker note in her case file for reference in future if she is going for anaesthesia. Perhaps one can consider using TIVA Remifentanil. Open for discussion and a penny for your thoughts.

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CERTIFICATION OF COMPLETION OF TRAINING

FCAI - Parallel Pathway

Ameerah binti Abdul Razak

continued from back page

Parallel Pathway (PP) Postgraduate Programme

The CoA PP Committee, as the custodian of the programme, has had a meeting with Dr Zalina Abd Razak from the MOH to discuss feedbacks from trainees, iron out examination/training issues and plan for future activities. At this meeting, it was agreed that the Sarawak General Hospital be recognised as an accredited training centre and Hospital Kangar and Sibu recognised as regional training centres for the PP programme. A part-time staff will be hired to help smoothen communication between the College and the trainees and keeping the candidates' registration and PP website up-to-date. This year's activities will start with an introduction to PP Postgraduate Anaesthesia Programme webinar in March 2022 followed by training of trainers pre-congress workshop on Work-Based Assessments: How to do it. Apart from that, there is a plan to conduct a preparatory course for MCAI viva/OSCE examination.

Proposal for Inclusion of Pain Medicine as a Subspecialty in the National Specialist Register and the Establishment of a Chapter of Pain Medicine under the CoA

Intensive Care Anaesthesia, as of now, is the only recognised subspecialty under Anaesthesiology and Critical Care that has been included in the NSR. Over the years, there had been many attempts to establish a subspecialty of Pain Medicine in Malaysia. We believe the time is right now as Pain Medicine in Malaysia has grown by leaps and bounds. Many of the leaders in Pain Medicine in this country had been anaesthesiologists. The first pain clinic was established by Professor Emeritus Dato' Alex Delilkan in 1988 and the first Acute Pain service in Malaysia was established in 1992 by Professor Ramani Vijayan in University Malaya Medical Centre. Dr Mary Suma Cardosa started the first Pain Programme in Selayang Hospital and subsequently spearheaded the Pain Free hospital programme in the MOH Malaysia. The number of specialists trained in Pain Management by the MOH and the Universities has involved more than 30 anaesthesiologists. We have been receiving request from the pain specialists in our fraternity for the subspecialty to be recognised. We are planning to apply officially to the Malaysian Medical Council for the inclusion of Pain Medicine in the NSR. Upon approval, the CoA Pain SIG will set up a task force to work on this together with the other Pain Societies in this country such as the MASP and the MSIPP to prepare the proposal for the subspecialty of Pain Medicine and for the establishment of a Pain Chapter under the purview of the CoA. We welcome suggestions and proposals alike from members to gauge the support for this endeavour within the fraternity.

CME Activities

1. Webinars in Neuroanaesthesiology (WIN 2022) - in collaboration with the Malaysian Society of Neuroanaesthesiology and Neurocritical Care and Persatuan Kakitangan Anestesiologi Hospital Umum Sarawak on 26th February 2022.

2. MSA CoA K.I.T.E series of webinars:
   I. Entry into postgraduate Anaesthesiology & Critical Care Masters Programme on 26th February 2022
   II. Introduction To Anaesthesia Parallel Pathway Programme on 5th March 2022

As an organisation that believes in evidence-based medicine, we have in our pipeline a series of workshop on "Critical Appraisal of Literature" that may help us distinguish between useful and flawed studies.

The CoA is not only interested in providing CME pertaining to acquisition of knowledge and practical skills in anaesthesiology but is also planning to hold CME on non-technical skills in anaesthesia, because the complexity of patient care in the modern operating environment demands a wide range of skills and attributes from the anaesthesiologists.

Updates on Conferences related to Anaesthesiology and Critical Care

1. 22nd ASEAN Congress of Anaesthesiologists (Hybrid) in Hanoi, Vietnam - 18th to 19th March 2022
2. 11th Biennial Conference on Cardiopulmonary Bypass (Virtual) - 26th to 27th March 2022

Until we meet again in the next issue, I would like to wish our Muslim colleagues a peaceful and blessed Ramadhan and to everyone, stay strong, safe and healthy.

Message from the President of the College of Anaesthesiologists, AMM

Professor Dr Marzida Mansor

Three months had passed since I last penned down my message. It has been an eventful period for Malaysia because besides continuing to battle the COVID-19 pandemic, we have also suffered the catastrophic climate change which saw Malaysia's biggest flood since the 1970's. The flood had been devastating to majority of those affected and dampened the Christmas celebration in this country. The College of Anaesthesiologists (CoA) extended our help to the victims by making donations via NGOs such as MERCY Malaysia and the MMA fund raising for private medical clinics affected by the flood.

The Chinese New Year celebration went well with Malaysians being allowed to cross states amidst the fact that the Delta and Omicron variant of the COVID-19 were still posing a threat to everyone's health and safety. Although Omicron is less deadly than Delta, there is still a significant risk to vulnerable populations, the unvaccinated or those who have yet to receive their booster. In keeping with our evidence-based practices, the CoA continues to support the Academy of Medicine of Malaysia (AMM) and the Malaysian Health Coalition (MHC) in coming out with advisories to help mitigate the current pandemic situation. One of it was to reinforce the stand by the government to encourage the booster dose and vaccination amongst children age 5 to12 years old. The other issue that the CoA has been lending our voice to was the issue of contract medical officers and the future of specialist training in this country.

The following are the activities that have been carried out by the CoA in the last three months:

Summary of advisories that have been published by the MHC and supported by CoA:

1. Our endemic COVID-19 strategy must include a variant strategy. We recommend to increase genomic surveillance, deploy boosters across Malaysia as quickly as possible with good safety monitoring and to implement the national testing strategy robustly.
2. Proceed cautiously with Act 342 (Prevention and Control of Infectious Diseases Act).
3. The 12th Malaysian Plan must be more ambitious - we recommend to dramatically strengthen healthcare and public health infrastructure and to introduce social health insurance.
4. Reinforce Malaysia's plan against Omicron by accelerating non-mandatory vaccination programme for children, amplify local COVID-19 genomic surveillance and increase availability of antiviral drugs, Nirmatrelvir and Molnupiravir.
5. Longer-term solutions for healthcare professionals. We recommend to expedite the formation of health reform commission proposed by the Health Minister on 15th January 2022, optimise distribution of Healthcare Professionals (HCPs) between urban and remote areas by ensuring improving incentives and allowances for those deployed to remote areas and their transfer process being made transparent, timely and justifiable and to control the intake capacity of medical students in both the public and private universities.
6. Speed up boosters to aged care facilities.

CoA participation in AMM Meeting on Specialist Training Pathway: Moving Forward.

On 5th February 2022, the CoA council members participated in the above meeting. The meeting discussed at length the following issues:

- Unifying Clinical Masters Programmes and Parallel Pathways;
- Awarding certificate of completion of specialist training (CCST);
- Post qualification working experience prior to NSR registration;
- Creating an enabling environment for specialist training;
- Strengthening the basic/foundation specialty training.

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Easy Dough Homemade Pizza

by Chef in Black

INGREDIENTS

PIZZA

DOUGH

- 1 CUP FLOUR
- 1 CUP PLAIN GREEK YOGURT

TOPPING (AS PER YOUR LIKING)

- TOMATO SAUCE
- MOZZARELLA CHEESE (SHREDDED) OR OTHER CHEESE YOU LIKE
- ONIONS
- ANCHOVIES
- BROWN MUSHROOM
- PEPPERONI
- CHICKEN SLICES

Mix the flour and yoghurt in a bowl and knead it into a dough. Get a baking paper and trace a circle 8-10" on it. Sprinkle some baking powder on the baking paper, spread the dough evenly, and roll it thin about 1/2 inch. Spread tomato sauce on the dough and add all the toppings. Finally, add the shredded cheese on top. You can add different toppings on your pizza eg. pineapple, olives etc. as per your preference. Heat up the oven to 200 degrees Celcius. Bake the pizza for about 18-20 minutes...serve it hot.