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• Malaysian Society of Anaesthesiologists
• College of Anaesthesiologists, Academy of Medicine of Malaysia

Message from the President of the MSA

Professor Dr Marzida Mansor

Dear Beloved Members and Colleagues,

As we are getting used to the new norm of social distancing, hand washing and sanitization, avoiding crowded places, the use of face masks and many more, no one will ever forget how the COVID-19 pandemic has been ravaging the world in an unprecedented manner and Malaysia is not spared from its impact. To date, the World Health Organization (WHO) has reported over 10 million cases globally and almost 500 thousand deaths world-wide.

The Movement Control Order (MCO) was swiftly enforced by the government of Malaysia on 18th March 2020 and we have gone through many phases of the MCO and here we are today, in the recovery phase.

The impact of COVID-19 on the anaesthetic fraternity has been tremendous as we are involved in looking after ill COVID-19 patients in the Intensive Care Unit (ICU) and in Aerosol Generating Procedures (AGP) such as intubation, ventilation and cardiopulmonary resuscitation.

Although we no longer limit our practice to anaesthetizing for emergency surgeries, we are still compelled to adhere to the new Standard Operating Procedures (SOP) that has been put in place and not let our guard down. We know that the pandemic is still far from over as the WHO has just reminded the world to get ready for the worse phase of the pandemic to come.

The Society first felt the need to respond to the pandemic in early March when various actions and strategies were formulated to ensure the safety of all our members as well as the public. The measures taken included:

1. Issuance of recommendations for Management of Anaesthesia and Intensive Care Services in Preparation of worsening Covid-19 pandemic.

2. Publication of MSA and CoA Guidelines for the Management of Patients Presenting for Surgery during the COVID-19 pandemic.

3. Endorsement of the Resuscitation in COVID-19 pandemic - Interim guidelines by the National Council of Resuscitation Team (NCORT), Ministry of Health (MOH) Malaysia.

4. Collaboration with Malaysian Health Coalition (MHC) in issuing joint statements and press releases pertaining to important issues in the management of the pandemic for our nation. In fact, MSA is one of the few societies with some individuals who had initially formed this coalition that eventually expanded to include many other societies and non-governmental organizations (NGOs) to help the authorities to make the best decisions based on input from the majority of the MCH members. We realised that we are stronger as a collective body than an individual society.

5. Providing and donating Personal Protective Equipment (PPE) to hospitals/members that were in dire need of the PPEs at the early stages of the outbreak.

6. Postponement of the MSA-CoA Annual Scientific Congress (ASC) from March to July 2020 initially but eventually the joint Organising Committee had decided to cancel the ASC for 2020 altogether due to the uncertainties of the COVID-19 situation. The new date for the ASC will be on 5th to 8th August 2021 at Shangri-La Hotel, Kuala Lumpur. Preparations are being made that we may have to resort to a virtual conference, if COVID-19 issues have not settled by 2021, to avoid another cancellation of the ASC.

7. Replacement of MSA-CoA ASC 2020 with series of webinars. Our first webinar was on “Awake Tracheal Intubation: Before, During and After Covid-19 Pandemic” on 27th June 2020. The speaker was the esteemed Dr Imran Ahmad. This was a collaboration with Karl Storz and UMMI Surgical and CPD points were provided. Members will be regularly updated with further webinars by MSA via the MSA website and e-mail.

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Message from the Editor-in-Chief

Welcome to the July 2020 issue of the Berita Anestesiologi.

I have been tasked to edit our Society's newsletter, and with the help of my fellow editors, we have come out with our second edition for 2020.

As our professional life is very much linked to our social and family life, we have decided to include in the newsletter, apart from the usual reports and articles from all the anaesthetic subspecialties; interesting stories of various endeavours and tales of travel of our fraternity.

I would like to encourage our members particularly the younger ones to share their work, activities and thoughts. Berita is a platform for all MSA/CoA members.

In this issue, there are articles concerning Covid-19. We have progressed from the initial fear of the virus to a new normal in our practice. It is hoped we continue to remain vigilant.

The Editorial Board would welcome any suggestions or ideas to improve our newsletter.

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8. Working together with the biomedical industry, the MSA and the CoA aim to provide webinars and CME activities with CPD points to enable members to collect enough CPD points for the renewal of APC for 2022. We also hope that members to will get used to this new norm of updating our knowledge through webinars and virtual continuous medical education activities.

9. Postponement of the MSA Annual General Meeting (AGM) - Authorities including the Registrar of Societies (RoS) had initially banned any form of activities including AGM by any societies. However, from 1st July 2020, we are allowed to have gatherings of not more than 250 participants, provided social distancing is practised. Preparations are underway for our Society to have the AGM on 16th August 2020 at the Le Meridien, KL Sentral, according to the SOP for conducting AGM by the RoS.

10. Organising a team of anaesthesiologists under MSA to volunteer their services especially in the peripheral areas. This is a collaboration with the Ministry of Health Malaysia in line with "Global Surgery" campaign on how to make surgery accessible to all.

Although we are living in a very challenging time, all other activities of the Society will continue as usual. I wish to remind members that the K Inbasegaran Research Grant has just been opened for applications and the closing date is in August 2020. Hurry and please do not miss this opportunity. The Society is also busy in making preparation for the World / National Anaesthesia Day on 16th October and we hope to launch the MSA Yearbook 2019-2020 by then.

Before I end, I would like to extend our sincere thanks and gratitude to all anaesthesiologists, intensivists, healthcare workers and all other frontline workers for their noble contributions and sacrifices during this war against COVID-19. As anaesthesiologists, we will continue to have a very active role in advocating for the health of our patients and health care workers in the most unprecedented situation. Let us get involved and let our voice be heard while we continue to stay strong and safe.

Contents

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Recommendations for Management of Anaesthesia and Intensive Care Services in Preparation of Worsening of The COVID 2019 Pandemic

Dated 16th March 2020

As of 12.00pm 15th March 2020, the Ministry of Health (MOH) confirmed additional 190 COVID-19 cases that were reported to the National Crisis Preparedness and Response Centre (CPRC) MOH. With these additional cases, cumulatively there are now 428 confirmed COVID-19 cases in Malaysia.[1] Of these, nine (9) patients are receiving treatment in intensive care units requiring ventilation support.

In view of this escalating numbers and the probability of more new cases detected as well as the possibility of healthcare resources to be diverted to focus on managing the pandemic (declared by the World Health Organization on 11th March 2020), the COLLEGE OF ANAESTHESIOLOGISTS together with the MALAYSIAN SOCIETY OF ANAESTHESIOLOGISTS and the MALAYSIAN SOCIETY OF INTENSIVE CARE (CoA/MSA/MSIC) have prepared these recommendations to aid anaesthesiologists in both public and private hospitals to consider implementing at their respective places of practice.

These recommendations are meant to be as broad as possible and may be adapted to location or hospital specific guidelines in conjunction with current available data and recommendations by the MOH. These recommendations are meant for the teams involved in providing anaesthesia/ICU services and they are not exhaustive. The CoA/MSA/MSIC will review these recommendations based on updated available data and information and may change as more evidence becomes available.

At the present moment, the leadership of the current pandemic management is adequately addressed by the MOH together with other agencies. Nationwide, MOH has designated hospitals at each state specifically to manage COVID-19 cases. For example, designating Sungai Buloh Hospital as its referral centre in the Klang Valley and strategically decanting all non-COVID-19 cases from Sungai Buloh Hospital to other MOH hospitals such as Cheras, Shah Alam and Banting etc. Arrangements are made by MOH to quarantine stable patients at some of the nursing colleges where there are single rooms and basic facilities.

RECOMMENDATION 1

All doctors should be aware of the hospital that has been designated by MOH as the referral centre for their locality and to establish a team at their individual hospitals to serve as liaison to ensure a clear line of communication is established between their hospital and the designated hospitals/ICU.

Broad principles of managing the COVID-19 pandemic will involve measured targeted response according to data accumulated from the MOH and based on the capabilities of the private/public hospital. One recommendation would be to identify the COVID-19 patients as below and to channel resources and staffing to manage them appropriately based on the clinical expertise available.

RECOMMENDATION 2

All doctors need to recognise the level of care required by the patients affected by the COVID-19 based on the tabulated description.

Category	Description of COVID-19 Positive Patients	% (based on anecdotal data on current number of patients)	Examples of Recommendations for team lead and staffing
1	Asymptomatic	80%	General medical and nursing team led by a senior physician and assisted by senior medical officers. These include Emergency Medicine Specialists, ID physicians or General Physicians / Paediatricians
2	No pneumonia		
3	Features of pneumonia with no supplementary O2 required	10-15%	Respiratory, Infectious Disease Physicians, General Physicians / Paediatricians
4	Features of pneumonia and supplementary O2 required		
5	Features of pneumonia with respiratory organ failure/ multiorgan failure requiring ventilatory support	3-5%	Most experienced team of nurses led by intensivists, anaesthesiologists, critical care physicians and other disciplines such as cardiology, nephrology and surgical teams where indicated

Note: The above is to simplify case management in order to maximise utilisation of available clinical expertise and allocate where it is most needed. They are meant as a guide only and subjected to whatever healthcare resources available at the particular hospital.

RECOMMENDATION 3

The Anaesthesia and Intensive Care Resources (personnel and equipment) are reserved for the most critically ill and vulnerable patients (Category 5) as these are the categories of patients who will require the most amount of interventions and acute critical care management that is time consuming. The level of care required will be a Level of Care 3 where the patient will be on ventilatory support and with potential multiple organ failure requiring one to one nursing care.

RECOMMENDATION 4

The current data indicates a higher mortality and morbidity involving those aged above 60 with co-morbidities, hence healthcare personnel who fall in this group should be redeployed to manage non-COVID-19 patients until more concrete data is available. This also applies to pregnant healthcare personnel.

RECOMMENDATION 5

For the non-designated hospitals (public or private), there should be plans regarding the following facility and equipment.

Inpatient Care

1. Person Under Investigation (PUI) ward with single rooms until test comes back negative in which they can be managed subsequently in a normal ward together with other non-COVID-19 patients.
2. COVID-19 wards for confirmed cases that ideally consists of single rooms.
3. Designated rooms in ICU for category five patients.

For all categories of the COVID-19 patients as above, appropriate Personal Protective Equipment (PPE) are to be worn at all times subject to the nature of care that is being planned to be performed.

Intensive Care Units For Category Five Patients

1. These could be provided either in negative pressure rooms or airborne infection isolation rooms if available.
2. If not available, rooms where nursing can be done with doors closed are acceptable alternatives.
3. Specifically, for anaesthesiologists and medical personnel assisting with procedures such as intubation, a Powered Air Purifying Respirators (PAPR) or appropriately fitting N95 mask with face shield or eye goggles should be worn.
4. Water resistant gowns and gloves covering the sleeves should be donned.
5. Where available, intubations should be done using video laryngoscope devices to minimise direct exposure to the oropharyngeal cavity and secretions.

6. There are mixed views on the use of Non-Invasive Ventilation (NIV) and High Flow Nasal Cannula (HFNC). In the event there are paucity of available ventilators, these modalities of ventilatory supports should be considered as well with all possible precautions taken to minimise exposure to aerosolised droplets.

7. Closed suction systems for removal of secretions from the respiratory system should be used when an endotracheal tube (ETT) is in-situ. During disconnection of the ETT from the ventilator, the ETT should be clamped.

8. If possible / applicable, more frequent air exchanges are done (15-30 times per hour) in the isolation rooms.

9. The above recommendations are also applicable for patients with no prior history of travel to the affected countries and presenting with SUSPECTED community acquired pneumonia that require intubation in the emergency department or ICU.

    a. These patients should be considered as possible COVID-19 positive patients until proven otherwise by lab test. All protocols applicable to a COVID-19 patient should be implemented to these patients including nursing them with strict infection control protocols.

    b. These steps are to ensure that healthcare personnel are not unnecessarily exposed to the virus. Exposure to the virus will render them inaccessible to care for future patients during their quarantine periods, and worse still if they are infected with serious clinical condition.

10. For COVID-19 patients who are intubated in a non-designated hospital, it is important to liaise with the regional designated COVID-19 hospital to plan the future care of the patient.

    a. Critical care may need to be initiated in the non-designated hospital itself using existing treatment protocols until a time is decided for transfer of care to the designated hospital upon availability of an ICU bed there.

    b. As availability of ICU beds at the designated hospitals may be limited, there will be a probability that the non-designated hospitals will have to manage these cases (suspected or confirmed COVID-19 infection). Therefore, all non-designated hospitals are expected to have their own measures in place in case this situation arise. All precautions are to be taken to handle suspected cases as potential COVID-19 until proven otherwise and PPEs are always worn when handling these patients.

RECOMMENDATION 6

Reallocation of resources are recommended to be done by the non-designated hospitals in preparation of worsening COVID-19 pandemic in regards of bed management and human resource.

Below is our suggestion on how resources are reallocated in the event above will be required of a non-designated hospital.

Assuming for ease of calculations in a 100-bed hospital and during this pandemic, 25% of the resources are allocated for the provision of care to COVID-19 patients and 75% to non COVID-19 patients.

As such 25 beds will be effectively reserved for the provision of care of possible COVID-19 patients and potentially 2-3 ICU beds will need to be allocated. On a daily basis, this would mean a team of one anaesthesiologist/intensivist with 6-8 nurses who will be required to provide care for two ventilated patients in two separate rooms over either three 8-hour shifts or four 6-hour shifts.

The 6-8 hours are considered to be an appropriate duration of time due to the high intensity of care required, high level of precautions that need to be taken, focussed attention and also safeguarding personal protection needed from any possibility of contracting the infection. A staff who is fully attired will not be able to de-gown with ease and put on new protective attires in order to limit the usage of very scarce PPEs.

RECOMMENDATION 7

Reallocation of resources are recommended to be done by the non-designated hospitals in preparation of worsening

COVID-19 pandemic with regards to the surgical services provided in the non-designated hospitals.

Surgeries (Elective And Emergency)

1. At this moment in time, there is no recommendation for suspension of elective surgeries to be enforced in the non-designated hospitals.

    a. However, it is prudent to have a business contingency plan ready in the event the need for suspension of elective surgeries were to be required for the healthcare personnel to focus more on the pandemic. These include postponement or cancellations of elective surgery or reduction of elective operating hours so that operating room staff may be deployed to other areas of need.

2. The operating room teams should also have a plan in place to anticipate performing surgeries for COVID-19 patients.

    a. Ideally one or two operating rooms should be identified that are located away from the main operating complex and will be dedicated for surgical procedures to be done on COVID-19 patients in hope to minimise cross contamination between COVID-19 and non-COVID-19 patients.

    b. Appropriate PPE, cleaning and sterilisation and disinfection of equipment used is priority.

    c. Where feasible, single use items are recommended.

3. There are also possibilities of non-COVID-19 surgical cases from designated hospitals being referred to non-designated hospitals for semi-elective or emergency surgeries in order for the designated hospitals to focus their resources on managing the pandemic. These discussions will need to be led by the management of the hospitals with the relevant government agencies so that the anaesthesia team can prepare for any additional workload.

4. In worst case scenarios, operating rooms may also be considered to be used for ventilation of patients when the intensive care unit beds become unavailable.

5. Intra-hospital movements of COVID-19 patients should be minimised with clear planned routes between destinations as to reduce exposure to the personnel, patients and the public.

RECOMMENDATION 8

A clear plan on the usage of Radiological Department investigation and services performed at the non-designated hospitals need to be in place.

Radiology Services

1. Use of the radiological department for diagnostic procedures should be minimised.

2. Where possible, bedside diagnostic equipment should be used such as Portable Ultrasound / Point of Care Ultrasound and Portable X-ray machines.

3. If unavoidable, a clear planned route should be made for intra-hospital movements for reasons above mentioned.

4. Following diagnostic imaging performed on the COVID-19 patient, the radiological equipment and room used are to be disinfected as recommended within the guidelines.

RECOMMENDATION 9

A robust plan on inter-hospital transportation of critically ill COVID-19 patients from non-designated to designated hospitals needs to be in place.

Transport Of Critically Ill Patients

1. Following recommendations for transport of the critical and non-critical patients, transportation should be carried out by trained staff that would ensure adequate equipments for transfer are available such as ventilators and monitors. Appropriate PPE should be used during transport and protocols for disinfection of ambulance and equipment are strictly adhered to.

2. Where possible, minimise handling of patients such as suctioning of ETT or administration of medications during transport.

3. Ensure intubated patients are adequately sedated or paralysed if indicated to minimise risk of ETT dislodgement during transport that may require re-intubation.

4. Transportation is not to be done by junior or inexperienced medical staff who are not familiar with management of critically ill patients to ensure that there is minimal risk of exposure to the COVID-19 virus due to their inexperience.

RECOMMENDATION 10

To ensure training of medical staff of the non-designated hospital in preparation of worsening COVID-19 pandemic are done in accordance to established standard guidelines and protocols before they are assigned to the care of COVID-19 patients.

Training And Education

1. Currently, the management of COVID-19 patients are done by the designated hospitals (designated MOH hospitals as well as one University Medical Centre).

2. Hence, the non-designated hospitals may be inexperienced in managing these cases. The MOH is willing to provide training if requested especially on treatment protocols, infection control measures, orientation on occupational safety and health, managing confidentiality and data protection among others as well as counselling for staff if requested.

RECOMMENDATION 11

Human resource/hospital management should be sensitive to the mental health issues of the medical staff involved in the care of the COVID-19 patients and ensure that their needs are taken care of where applicable.

Psychological Support

1. There will be various issues anticipated during this period.

2. Be mindful of healthcare personnel who will be battling issues at their domestic front as well.

3. Anticipate mental and physical fatigue to exhibit in the health care personnel.

4. Adequate rest in between shifts should be available for the healthcare personnel especially for nurses who are expected to be in the isolated single rooms wearing PPE for long periods of time.

5. Trained counsellors should be made available to address some of the psychological effects faced by COVID-19 patients and their family members, and also encountered by the healthcare personnel.

DISCLAIMER

The College of Anaesthesiologist, Academy of Medicine of Malaysia (AMM), the Malaysian Society of Anaesthesiologists and the Malaysian Society of Intensive Care are three professional bodies of practising academicians and anaesthesiologists/intensivists from public, private and university hospitals based in Malaysia. These recommendations are non-exhaustive and serve as a guide on how to prepare for the COVID-19 pandemic. It is expected that individual hospitals/anaesthesiologists will be guided by their own needs and proposals in order to prepare themselves for any eventualities.

The recommendations here will not replace or supersede the most current guidelines and instructions from the MOH Malaysia and as such individuals and hospitals are encouraged to refer to the most updated guidelines and recommendations as released regularly by the MOH, Malaysia.

The College of Anaesthesiologists, AMM, the Malaysian Society of Anaesthesiologists and the Malaysian Society of Intensive Care will update these recommendations when feasible from time to time. We wish everyone their best in preparing to face this pandemic and urge everyone to be safe at all times.

Prepared by the College of Anaesthesiologists, AMM, the Malaysian Society of Anaesthesiologists and Malaysian Society of Intensive Care.

REFERENCES

1. Press statement of the Ministry of Health Malaysia on updates on the Coronavirus disease 2019 (COVID-19) dated 15th March 2020

2. Guidelines on 2019 Novel coronavirus (2019-nCoV) Management in Malaysia

3. Australian Society of Anaesthetists Pandemic Planning Role for Australian Anaesthetists

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Malaysian Society of Anaesthesiologists

GUIDELINES FOR THE MANAGEMENT OF PATIENTS PRESENTING FOR SURGERY DURING THE COVID-19 PANDEMIC

Dated 6th April 2020

College of Anaesthesiologists, AMM

Greetings and well wishes from the Executive Committee of the Malaysian Society of Anaesthesiologists (MSA) and the Council of the College of Anaesthesiologists, Academy of Medicine of Malaysia (CoA-AMM). Since our last communication on 16th March 2020 much has happened - our nation enforced movement control order, increased number of cases from 428 to more than 3000 cases, established new quarantine facilities, and most importantly, rallying together as a single united force to overcome the threat of COVID-19.

The College of Surgeons, AMM has issued an advisory on 27th March 2020, the contents of which we are in full agreement with, in particular that we must assume all patients are potential contacts, thus, when feasible all patients should undergo COVID-19 testing before surgery, and to reschedule all elective operations.

While there are established practical recommendations for critical care and anaesthesiology for the COVID-19 patients, there are concerns in the management and the precautions that should be embarked upon especially for the **UNTESTED ASYMPTOMATIC** patient undergoing a surgical procedure during this pandemic. This area warrants considerable attention as the number of COVID-19 infected cases escalate daily in alarming rates. It is essential to maintain a rational and yet **SAFE** approach in providing anaesthesia to the asymptomatic patient who presents for a surgical procedure.

In the past few days, strong epidemiology data is emerging that a significant percentage of the community with no risk history may be pre-symptomatic or asymptomatic, and infectious. In addition, there were cases where patients had failed to disclose contact history or withheld the contact history intentionally.

As anaesthesiologists, we routinely perform aerosolising generating procedures (AGP) and, therefore, highly exposes us to the risk of infection during the course of our work. Hence, it is of critical importance that we establish a practice that is of the utmost standard with regards to personal protection equipment (PPE) subject to the COVID-19 status of patients requiring anaesthesia care. AGPs include but are not limited to intubation, oropharyngeal / airway suctioning, bronchoscopy, extubation and disconnection of the breathing circuit.

The evidence on the management for the population of asymptomatic unscreened patients undergoing anaesthesia during the time of a pandemic is sparse. Hence, recommendations made in this document are based on expert opinions and recent publications available. The MSA and the CoA **STRONGLY ADVISES** members to follow safe practices in upholding protection of health care workers (HCW) and patients alike by adopting the following:

RECOMMENDATIONS

1. **Testing for the novel COVID-19** should be performed on all patients admitted for surgical procedures requiring anaesthesia as an inpatient prior to surgery.

   a. A single test for COVID-19 is sufficient in an asymptomatic patient.

   b. A repeat test for COVID-19 should be done, together with a referral to an Infectious Disease Physician/Physician as appropriate, when a patient presents with suspicions of being possibly positive for COVID-19.

2. We recommend following the **classification of surgical patients** undergoing anaesthesia to further guide in the management:

   a. Category 1 - Elective Cases
      - These are purely elective cases in which surgery can be safely deferred.
      - To defer the surgical procedure until such time that the threat of COVID-19 infection subsides nationwide.

b. Category 2 - Semi-Emergency Cases
   - Semi-emergency cases are surgical cases that need not be performed immediately but will need to be performed in a stipulated time.
   - Screening test for COVID-19 is **STRONGLY ADVISED**.
   - Cases shall be posted for surgery only once results are made available.

c. Category 3 - Emergency Cases
   - These are emergent cases where patients are hemodynamically stable, but the procedure must be done to prevent progression of the disease process and to preserve organ function, otherwise life is threatened and/or morbidity is increased.
   - Deferment is not an option. Testing for COVID-19 may be impossible due to the dire urgency of the case.
   - If COVID-19 testing is performed, the urgent nature of the surgery precludes waiting for its results.

3. Preoperative evaluation:
   a. In addition to the usual preoperative assessment, risk assessment of COVID-19 infection must be done for all cases, preferably using a structured questionnaire format. The risk assessment considers the following:
      i. epidemiological risks
      ii. signs and symptoms of acute respiratory illness
      iii. laboratory findings
      iv. chest x-ray findings

   b. In addition to the informed anaesthesia consent, the patient or next of kin / guardian must sign a declaration screening / assessment form for COVID-19 infection prior to surgery.

4. Appropriate PPEs are to be used at all times when managing any patient for surgery.
   a. If COVID-19 screening results are negative, we **STRONGLY RECOMMEND** all anaesthesiologists and assistants performing the AGPs to use full PPE as follow:
      - N95 Filtering Respirator Face Mask
      - Head and neck cover
      - Eye protection glasses / Face shield
      - Long sleeve water repellent gown
      - Water repellent plastic apron
      - Double gloves
      - Shoe / Boot covers

   Usage of powered air-purifying respirator (PAPR) are **recommended** if available.

   The rationale behind the decision for the advisory on the usage of PPEs, in spite of a negative screening test for COVID-19, is due to the possible of false negative results especially at the onset of the illness.

   b. If COVID-19 screening results are positive or in Category 3 Emergency Cases when screening was not able to be performed or results are not availalble, our recommendations are consistent with the World Health Organization for the PPE as follows:
      - N95 Filtering Respirator Face Mask
      - Head and neck cover
      - Eye protection glasses / Face shield
      - Long sleeve water repellent gown
      - Water repellent plastic apron
      - Double gloves
      - Shoe / Boot covers

   The rationale behind the driving decision for the advisory on the usage of PPE for Category 3 cases is to assume all patients are COVID-19 positive until a negative test for COVID-19 is obtained.

5. Surgical cases are to be done in a **designated COVID-19 operating theatre** (OT). If available, ideally in a negative pressure operating room (OR).

6. The anaesthesia and surgical teams must receive supervised training on donning and doffing of PPEs, preferably core team be trained at the initial stage.

7. The anaesthetic core team will consist of a specialist and/or an experienced medical officer / experienced anaesthesia nurse.

8. The **choice of anaesthetic** technique:
   a. Regional anaesthesia is the anaesthesia technique of choice where it is appropriate for the type of surgery and there are no contraindications.

b. When general anaesthesia is required, the use of video laryngoscopy and/or aerosol box if available is highly recommended for ALL cases.

9. Anaesthesiologists are encouraged to **practise** the anaesthesia processes **via simulations**. The anaesthesia induction and emergence techniques planned should minimise aerosol generation and dispersion considering the risk to patient and HCW safety. Emergence is as crucial as induction of anaesthesia; hence, vigilance is paramount.

10. Post-operatively, **recovery** of the patient should be done in the **same designated COVID-19 OR in full PPE** until transferring the care to the designated ward team.

11. The patient should then be nursed in an isolation room till the COVID-19 test results are available and deemed not a threat to HCW by the surgeon/physician in charge of the patient.

12. All Anaesthesiology Departments in hospitals managing COVID-19 patients must have in place standard operating procedures / guidelines in perioperative management of COVID-19 patients and have a COVID-19 OR management plan.

13. All Anaesthesiology Departments must have in place standard operating procedures:
    a. in the event of inadvertent exposure of HCW to COVID-19 positive patients.

    b. to prevent contamination of anaesthesia machine, equipment and OR environment in ALL cases.

    c. to support HCW's mental health pre-emptively.

The aim of this advisory is to herald the importance of **safety of ALL HCW** in dealing with asymptomatic patients during a pandemic. This is taking into consideration of the high-risk exposure of the anaesthesiologists in AGPs. The above measures are advised until further evidence is available.

REFERENCES

1. Guidelines for COVID-19 Management in Malaysia No 05/2020 (EDISI KELIMA)
2. Spinal anaesthesia for patients with coronavirus disease 2019 and possible transmission rates in anaesthetists: retrospective, single-centre, observational cohort study, Qi Zhong et al, BJA Advance Access Publication
3. Centers for Disease Control and Prevention Coronavirus Disease 2019 (COVID-19) Infection Control Guidance
4. Rational use of personal protective equipment (PPE) for coronavirus disease (COVID-19), an interim guidance by the World Health Organization dated 19th March 2020
5. ANZCA statement on personal protection equipment during the COVID-19 pandemic dated 30th March 2020
6. Perioperative Management of Patients Infected with the Novel Coronavirus. Recommendation from the Joint Task Force of the Chinese Society of Anesthesiology and the Chinese Association of Anesthesiologists. Xiangdong Chen et al, Anesthesiology 2020, Special Section: COVID-19

Annual General Meeting of the Malaysian Society of Anaesthesiologists & College of Anaesthesiologists, Academy of Medicine of Malaysia

16th August 2020
Le Meridien Hotel, Sentral Station, Kuala Lumpur

PROGRAMME

0930 - 1000	Webinar
1000 - 1030	Coffee / Tea Break
1030 - 1130	Annual General Meeting of the Malaysian Society of Anaesthesiologists
1130 - 1230	Annual General Meeting of the College of Anaesthesiologists, Academy of Medicine of Malaysia
1230 - 1330	Lunch

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Protecting health care workers with PPE

We know you have questions related to PPE. We are here to provide guidance on the different types of PPE and its proper use.

Reducing the risk of cross-contamination

Keeping providers and patients protected is an ongoing concern. Help reduce the risk of bacteria and other contaminants spreading from people, the environment and medical equipment within your facility with these resources.

Helping reduce the risk of secondary complications

We recognize you are being asked to do far more with far less right now. We are here to help you reduce the risk of secondary complications and maximize efficiencies so you can focus on what matters most – your patients.

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University Malaya Medical Centre

by Dr Carolyn Yim & Dr Liew Mun Thing

District hospitals provide basic anaesthetic care to the community where they are located at. Doctors at these hospitals are familiar with providing commonly used anaesthetic techniques such as inhalational general anaesthesia and regional anaesthesia. However, less common techniques, such as Total Intravenous Anaesthesia (TIVA) is seldom used due to limitations of resources (medication and equipment). Furthermore, accessibility to workshops may also be limited as these hospitals are usually located in the rural districts.

An example of such a hospital is Sarikei Hospital. It is a 182 bedded District Hospital (with Specialists) located approximately one-hour drive away from Sibu Hospital. Besides the major specialties, there are visiting sub-specialties such as ortho arthroplasty, advanced trauma, vascular, gynae oncology and dental maxillofacial. The Department of Anaesthesia consist of two Specialists with eight Medical officers. On an average day there are two elective operating theaters running during office hours with one emergency OT running 24 hours a day. Intensive Care Unit (ICU) care is provided via a four-bedded ICU.

On the 11th November 2019, A Safe Anaesthesia workshop was conducted with the support from Medtronic (Pick Yee and Adrian) and Aspen (Mr Goh). The organising committee comprised Dr Liew Mun Thing (Head of Department), Dr Carolyn Yim (Advisor and Invited Speaker) and Dr Goh Keng Yuen (Committee Member). Participants consisted mainly of doctors and nursing staff from the Sarikei Hospital. A small group from Rejang Hospital (Private Hosptial in Sibu), represented by Dr Thang with two nursing staff also joined the workshop.

The aim of this workshop was to expose participants on performance of the TIVA technique safely through appropriate patient selection and monitoring. Lectures covering the pharmacology of TIVA as well as an introduction to neuromonitoring with Bispectral Index (BIS) was given by Dr Chew (a specialist from the Sarikei Hospital) and Mr Adrian, respectively. A revisit on the latest Difficult Airway Society (DAS) algorithm with regards to Airway Management of the Obstetric Patient was covered by Dr Carolyn Yim.

Participants were given opportunities to participate in hands-on sessions in the operating theatre where the TIVA technique was demonstrated with BIS monitoring. They were able to see and gain experience of how TIVA is performed and how the BIS monitor facilitates patient safety. They were also able to perform intubations using the McGrath Video Laryngoscope on a difficult intubation mannequin manned by Ms Pick Yee. They learnt not only how to use a videolaryngoscope safely but also some maneuvers to ensure smooth intubations.

The workshop was a success and the committee hoped that everyone had benefitted from the session. We hope to continue to have such workshops at the district hospital level to ensure both doctors and nurses can continue to upgrade their knowledge and skills.

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THE NEW NORM OF AIRWAY MANAGEMENT

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The current pandemic caused by the novel coronavirus, now commonly known as Covid-19, has affected every aspect of the world. It has also greatly changed the way the anaesthesiologists manage the patients' airway. In order to prevent the risk of viral transmission, the airway has to be safely, accurately and swiftly (Safe-Accurate-Swift) secured by the most appropriate airway manager resulting in no exposure to the patients' aerosol.[1]

The term "new norm" is synonymous with the current pandemic. For the general public, this brings up visions of handwashing, wearing face mask and keeping a reasonable distance from one another when out and about. For the anaesthesiologists, our "new norm" is to not only balance the safety of the healthcare workers (HCW) but to ensure the patient's airway is managed properly. In the beginning, there was a widespread feeling of fear of this infection. We hear about our colleagues, in more than one hospital, being inadvertently exposed to the patients, either due to non-disclosure of history or some other technical matter. But in the face of adversity, something good came out. We had a common cause. The fear and anxiety drove all of us to be closer together, not only within one's own department but also across different institutions. This fear is less now compared to before with our decreasing number of positive cases and better protective measures. Even though the percentage of positive pre-operative cases in Malaysia is very low, reported as about 0.1%, there is still the fear of the unknown. As not all members of the public is routinely screened and with present data being new, the actual percentage of asymptomatic carriers is not clear. The projected percentage of asymptomatic carrier varies from less than 50% to as much as 80%.[2,3] Not surprisingly, compared to most of the other medical specialties, the anaesthesiologists on the whole, have exhibited a higher degree of concern about the screening status. This heightened obsessiveness is understood as we are at closer proximity to the patients' airway and furthermore, would be the ones involved for those requiring ventilatory support.

Based on experience of the SARS outbreak in 2003, suspected or confirmed Covid-19 cases with a high viral load should ideally be conducted in individualised negative pressure rooms, with the HCW donning full personal protective equipment (PPE) and powered air purifying respirator (PAPR).[4] Due to a worldwide demand, PPEs especially N95 masks and PAPRs can be low in supply and most of the operating theatres in Malaysia do not have negative pressure rooms. Hence, the use of an aerosol box, a transparent acrylic designed to add extra protection to the intubator and the surrounding environment during intubation, was advocated.[5] This box has an opening at the caudal side to fit over the patient's chest and neck, while the opposing side has two holes through which the intubator can insert their hands. Simulation of intubation using the box with a coughing patient demonstrated that contamination occurred at only the inner surface of the box, the laryngoscopist's gloves and gowned forearms. Examination of the laryngoscopist and the room with ultraviolet light showed no macroscopic contamination outside the box.[6] However, thorough cleaning and disinfection of the aerosol box, with disinfectants such as Virusolve® wipes, must be implemented after every usage to prevent future cross contamination. There were slight variations in terms of the box size and design which may have some effect on the intubation process, but on the whole, the anaesthesiologists widely utilised this new tool. However, certain groups of patients, like small children or claustrophobic patients, may not be able to comply with these aerosol boxes.

Patients infected with Covid-19 who went on to develop severe acute respiratory infection (SARI) will warrant endotracheal intubation. Intubation, an airborne generating procedure, imposes a very significant risk to the intubator as the viral load in the airway is probably high and contagious.[7] Healthcare professional bodies related to anaesthesia and intensive care advocate intubation using videolaryngoscope (VL), handled by a team of experts wearing full PPE.[1,8] The aim of videolaryngoscopy is to maximise the distance between the operator and the airway, thereby reducing the risk of contamination from airway droplets. What was once seen as a useful adjunct for the difficult airway has become a must for endotracheal intubation, regardless of the level of difficulty. One of the worries of this "new norm" for endotracheal intubation is the reliance on VLs, which is not exempted from wear and tear. The usage of VLs is increasing with the reinstating of usual operating theatre services at the time of writing this article. Thus, this precious device must be maintained properly and looked after with great care. If this pandemic persists, there may also be a lack of skill of basic airway management amongst the younger generation of anaesthetic doctors.

Although the secure placement of an endotracheal tube in trachea has been defined as definitive airway management, the primary focus of resuscitation is to maintain the patient's oxygenation and ventilation while preserving the haemodynamic status. While, oxygenation and ventilation could be achieved by many devices such as endotracheal tubes, supraglottic airway (SGA) devices and surgical methods, the bag-mask-ventilation (BMV) remains as the basic and one of the most important component of airway management. However, BMV is an aerosol-producing procedure, placing HCW at high risk. Apart from the safety measures already mentioned above, high-efficiency breathing circuit filters should be installed between the mask and the breathing circuit or respiratory bag, and at the proximal end of the breathing circuit.[9] As BMV is avoided in such situations, safe apnoea time can be optimised by employing the ramped positioning for the obese patients during preoxygenation. Leakage due to high fresh gas flow pressures can be prevented by conducting 3-5 min of preoxygenation using minimal oxygen flows with well-fitting mask connected to a closed or rebreathing circuit, such as the Mapleson's C circuit. In order to get a better face mask seal, the 2-handed VE-grip is preferred over the CE-grip.[1]

In the initial phase of the pandemic, guidelines from the Safe Airway Society and the joint consensus of the Difficult Airway Society (DAS), the Association of Anaesthetists the Intensive Care Society, the Faculty of Intensive Care Medicine and the Royal College of

Anaesthetists (RCoA) put emphasis on tracheal intubation for airway management in Covid-19 due to the fear of generated aerosol.[1,8] It was assumed that the seal was more reliable with the endotracheal tube than the SGA. Later on, in May 2020, DAS together with the faculty of Intensive Care Medicine, the Intensive Care Society, the Association of Anaesthetists and the RCoA jointly stated that there was no significant data to prove or disprove that SGA use is aerosol-generating.[10] In fact, SGA removal is associated with reduced airway problems such as coughing and hypoxia, resulting in a smoother emergence compared to endotraceal tube extubation.[1]

Endotracheal tube extubation poses an equally or even a greater risk of aerosol-generation compared to intubation due to the return of airway reflexes following reversal of muscular paralysis. This can lead to gagging, coughing and, in general, peri-extubation agitation.[11] Similarly with intubation, the same strategies and precautions should apply. It is important to have an extubation checklist and consolidate it with thorough planning and allocation of specific roles in case a complication arise. Prior to extubation, it is essential to optimise analgesia as well as anti-emetics to prevent droplet generation from vomiting.[11,12] Intravenous lignocaine, remifentanil and dexmedetomidine can be administered to facilitate a smooth emergence. Performing a "deep" extubation is an option, however, this can expose the anesthetised patient at risk of an unprotected airway. Although SGA can produce smoother emergence, it is not recommended to be used as a bridge prior to extubation, i.e. exchanged in place of an endotracheal tube at the end of a procedure, as this would add another airway manipulation procedure.[1] Another method to reduce exposure to aerosol is by applying an anaesthetic face-mask with an attached airway filter to maintain a face-mask seal when the endotracheal tube is withdrawn.[11,12] When appropriate, the patient can be transitioned to a facemask or nasal cannula with minimal oxygen flow, less than 5 L/min. Lastly, a surgical mask should be placed immediately over the supplemental oxygen delivery device.[1]

The patients may present with a difficult anticipated or unanticipated airway which is not able to be managed with neither videolaryngoscopy nor SGA. At present time, there is not much evidence regarding awake flexible scope intubation and the guidelines recommend such procedures, alone or with SGA, to be avoided and reserved only if truly indicated.[1,13] If unavoidable, the flexible scope intubation may be performed with the patient asleep for the exchange of SGA with the endotracheal tube or awake under optimal conditions to reduce coughing.[8,9] A group in London described how they performed an awake flexible scope nasal intubation in a suspected Covid-19 patient with a large tongue tumour pending airway obstruction.[14] Apart from ensuring adequate sedation and airway anaesthesia, the airway management team was donned in PPE with PAPR. As the flexible scope intubation is rarely practiced even before the pandemic, this skill must be maintained when it is needed the most.

In the event an emergency front of neck access (FONA) is needed, a modified version of the DAS scalpel cricothyroidotomy is recommended.[1] The differences include excluding both oxygen failure and blocked circuit, donning full PPE for the staff and the FONA being performed by the most appropriate airway manager.

The fight is not yet over. As time progresses, there may be other things to be learnt. At the time of writing this, the number of cases in Malaysia has declined and there is an atmosphere of relief amongst many of us. One of the good things seen during this pandemic is how everyone did their part in getting through this. Never have we been closer to one another by being apart. We in the Special Interest Group in Difficult Airway Management would like to thank each and everyone in our fraternity in helping each other out.

Stay Safe, Everyone.

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"ASK WHAT YOU CAN DO FOR YOUR COUNTRY"

by Dr Mafeitzeral Mamat

I had just finished my case for the day in OT that afternoon sometime end of March. As usual, I would try to tune in to the daily live updates by the Ministry of Health team lead by the Director-General himself. The alarming exponential rise of Covid-19 cases was a worry to all of us in Malaysia.

"We need you to volunteer and fight Covid-19 together with us."

Datuk Dr Noor Hisham Abdullah, the DG, himself pleaded for doctors (specifically for intensivists and anaesthesiologists) in the private sector to volunteer and help the MOH hospitals. There was also an SOS email by the Malaysian Medical Association (MMA) and Malaysian Society of Anaesthesiologists (MSA) pleading for volunteers.

In the past, I had volunteered to be in the medical relief team in various disasters around the world. Now the global affecting disaster is in my own country. The distress call was definitely something I will not hesitate to answer, why not?

I then registered myself in the link provided by MOH. Later, the MSA organised and sorted out the paperwork with the MOH in allowing us to join the MOH ICU unit. There was a total of five anaesthetists / intensivists from the private sector and non-MOH who joined Hospital Sungai Buloh (HSB) Intensive Care unit in different stages of time:

1) Dr Kamal Bashar Abu Bakar (KPJ Rawang)
2) Dr Hasbe Zuraina Abu Bakar (Columbia Asia Setapak)
3) Dr Aliza Mohd Yusof (HCTM UKM)
4) Dr Aizad Azahar (HP UPM)
5) Myself

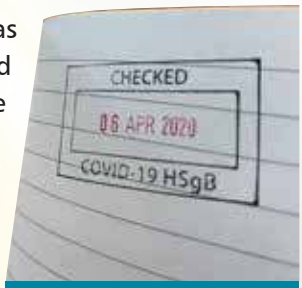
Dr Aliza, me and Dr Kamal

Hospital Sungai Buloh (HSB) was designated as the Klang Valley centre exclusively for Covid-19. MOH anticipated the cases would massively spike in mid-April after the sudden surge of Covid-19 patients in March.

The ICU was expanded from its normal capacity of 35 ICU beds into 60 ICU beds. (HSB was planned to provide 100 ICU beds if it needed too) The beds in Burns High Dependency Unit and Cardiac Care Unit were turned into ICU beds fully equipped with a ventilator for each bed. At this point obviously there was lack of manpower to cope with the emergency expansion.

MOH has mobilized their doctors and nurses to HSB however other MOH Klang Valley hospitals could not fulfill capacity required by HSB because the public hospitals were busy themselves with the ongoing non Covid-19 hospitals.

It was all jitters on the first day as the hospital itself looked deserted from the outside. The sight of the usual haphazard traffic due to visitors' cars parked along the roadside outside the hospital for kilometers was not there. The parking spaces in the hospital compound were visibly empty.



Daily "immigration clearance" to enter HSB premises

I worked in HSB years ago and it was all smiles to see the familiar faces of friends and colleagues. Few were my medical officers (MOs) then and now we are colleagues. We were also joined by other MOH anaesthetists from all around Malaysia.

Correct method to don and doff the PPE is very important and we were briefed in detail and trained strictly on our first day there before we were allowed to enter the ICU. For Aerosol generating procedures (AGP) like intubation and extubation of patients, we need to be donned at the highest level of protection. HSB is well equipped with a PAPR suit (Powered Air-Purifying Respirator). It was my first time donning the full "spaceman" suit (eat your heart out Sheikh Muzaffar!) Haha..

We were rostered together with the other MOH Anaesthesia & Intensive Care specialists to cover the Intensive Care Unit (ICU) with different teams. Each team was in charge of a designated ICU wing and was led by an Intensivist with a few anaesthesia & intensive care specialists and a number of medical officers.

N95 leak test

Full PPE.. Who is who?

Every morning, the whole department would gather in the makeshift "bilik gerakan jabatan" in the Daycare area. It also served as our jumbo sized pantry with shower facilities. This was where all the brilliant minds of Intensive Care actively worked led by the Intensivists in charge; Dr Lee Chew Kiok and Dr Eng Kar Seng. Senior Consultants from HKL, Dr Shanti Rudra Deva and Dr Ismail Tan came to help us too.

Legendary daily early morning handovers

The ID team joined us too on certain days to co-manage the sick patients. We went through all the cases; brainstorming the management of patients in detail. At all times Dr Quah would ensure we maintain our social distancing in her strict fashion! (I'm sure if she had "rotan", she would bring justice using it!)

Dr Shaiful Zaman, the HOD of Anaesthesia and Intensive Care unit, planned his manpower well in preparing the Hospital as a Covid-19 centre since late February. He made sure we were able to work on single shifts each and not do too many calls. This applied to the ICU medical officers too. Rest was adequate because of this as it was very exhausting after each shift.

What made our work physically exhausting was the long hours of strict PPE gowning (once we were in the ICU fully donned up, we would stay there until the end of our shift. Hence we would ensure that we have had our food and drinks adequately beforehand and of course toilet break!). Doffing was more important in maintaining Infection control topping it up with shower afterwards. I had never felt so clean in my life with multiple showers per day! The shift could be mentally draining too because of the stress in managing high risk patients.

I was in Sungai Buloh for three weeks in April and it was definitely a "fellowship" stint to remember. We have to thank Malaysians because it was with their efforts too that we have managed to flatten the curve by obeying the strict MCO measures by the government. It was immediately realised as we were not receiving surges of new patients especially in the ICU. By the end of my stint everything looked under control.

Preparation for intubation in full gear

I totally cherished the teamwork amongst all team members in the ICU. The dedication and hard work by the nurses, MAs and especially the MOs who made me remember why I chose to be in this field many moons ago. It was great to see the determination and energy of the young ones and I certainly felt youthful again working in this environment. I enjoyed (sounds morbid) my whole time there despite the hecticness and stress of managing the unknown.

Memorable last Covid-19 call in HSB (post 0229)

It was very rewarding observing the long recovery of Covid-19 ICU patients. It brought us warm feelings to discharge them from ICU. Everybody will line up and smile, waving at the patient as he/she was being wheeled out of ICU. There were sad emotional times too when we lost our battle with the non survivors. We all wanted to save the patients from this dreadful disease to be back in their family's arm. It was not easy to be the intermediary, the one communicating with the family members via the smartphone at best. We could feel the agony of non closure for the next of kin when a COVID-19 dies.

We are still in the Covid-19 pandemic. It is not over yet. However, I am confident that as the last line of defence, the country can depend on intensivists and anaesthetist of Malaysia.

#KitaMestiMenang
#KitaJagaKita

COVID-19 PANDEMIC RESPONSE BY THE MALAYSIAN SOCIETY OF ANAESTHESIOLOGISTS AND COLLEGE OF ANAESTHESIOLOGISTS, ACADEMY OF MEDICINE OF MALAYSIA

by Dr Gunalan Palari Arumugam

The COVID-19 pandemic has been at the forefront of everyone's mind since the beginning of 2020. As part of strategies to prepare anaesthesiologists and intensivists for the pandemic, various initiatives were started by the Malaysian Society of Anaesthesiologists and the College of Anaesthesiologists, Academy of Medicine of Malaysia as well as the Malaysian Society of Intensive Care.

We issued two guidelines over the course of the pandemic. The first was released on the 16th March 2020 titled "RECOMMENDATIONS FOR MANAGEMENT OF ANAESTHESIA AND INTENSIVE CARE SERVICES IN PREPARATION OF WORSENING OF THE COVID 2019 PANDEMIC". The guideline was issued in response to the escalating number of new COVID-19 cases with possibility of healthcare resources to be diverted to focus on managing the pandemic which was declared by the World Health Organization on the 11th March 2020. We prepared these recommendations to aid anaesthesiologists in both public and private hospitals to consider implementing them at their respective places of practice.

The recommendations were meant to be as broad as possible with the caveat that they will need to be amended based on updated available data and information as the situation then was fluid and things might change as more evidence becomes available.

The second guideline that we worked on was "GUIDELINES FOR THE MANAGEMENT OF PATIENTS PRESENTING FOR SURGERY DURING THE COVID-19 PANDEMIC", issued on the 6th April 2020. While there were established practical recommendations for critical care and anaesthesiology for the COVID-19 patients, there were concerns in the management and the precautions that should be embarked upon especially for the UNTESTED ASYMPTOMATIC patient undergoing a surgical procedure during this pandemic. This area warranted considerable attention as the number of COVID-19 infected cases was escalating daily at alarming rates. It was essential to maintain a rational and yet SAFE approach in providing anaesthesia to the asymptomatic patient who presented for a surgical procedure. On top of that, strong epidemiology data was also emerging that a significant percentage of the community with no risk history might be pre-symptomatic or asymptomatic, and infectious. In addition, there were cases where patients had failed to disclose contact history or withheld the contact history intentionally. As anaesthesiologists, we routinely perform aerosol generating procedures (AGP) and, therefore, highly exposed ourselves to the risk of infection during our work. Hence, it was of critical importance that we established a safe practice with regards to personal protection equipment (PPE) subject to the COVID-19 status of patients requiring anaesthesia care.

Both these guidelines were circulated to our members and were well received. Our appreciation to the team led by Dato' Dr Jahizah Hassan and Professor Dr Marzida Mansor for pursuing the initiative in a short period of time.

Another problem which was identified was the availability of anaesthesiologists and intensivists in the public hospitals. We were worried that the pandemic might be prolonged or if there were possibilities of some of those directly involved in the management of COVID-19 patients might be required to be quarantined or the doctors themselves became COVID-19 positive. Thus, the MSA together with the COA helped to put in place a plan that would allow help to be sourced from private anaesthesiologists and intensivists. This collaboration was assisted by Dr Melor Mansor, Head of the Anaesthesia and Intensive Care Services for the Ministry of Health Malaysia. Members especially those were currently in private practice and members who have retired from active clinical work volunteered in the event the need arose. A total of 30 members gave their names and four members helped the Sungai Buloh Hospital and another three assisted with their time at the Institut Kanser Negara. We express and record our sincere appreciation to them.

At present, as we enter the month of June, the number of new COVID-19 cases is steadily declining, and we have flattened the curve to some extent. However, vigilance is of paramount importance. Our ICUs nationwide can handle any new cases provided the number of new cases is at a manageable level. We hope that there will not be a requirement for an enhanced response which would mean that the MOH team are working at their maximum capacity. As things remain fluid over the next few days to weeks, we hope that everyone will play his/her part and follow the guidelines released by the authorities. Specifically, for our members there will be a need to ensure that all preparations are ready, and we are available to assist accordingly if such a need arises.

Once again, thank you to all front liners and keep safe everyone.

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National Anaesthesia Day 2019 and Reminiscing The First National Anaesthesia Day 2001, Penang

by Dato' Dr Yong Chow Yen and Dr Azelia binti Mansor

In 2001 Hospital Pulau Pinang held the first national level National Anaesthesia Day from 13th to 16th October and in 2019 we celebrated our Anaesthesia Day on 22nd October 2019. For 19 years, like the rest of the country, from 'Your Safety Is Our Primary Concern' to "Resuscitation Saves Lives", we have enjoyed sharing the history, progress and successes of anaesthesia with our colleagues and community.

As we know, anaesthesia is a medical discipline with a fascinating past and is often said to be one of the wonders of modern medicine. One hundred and seventy years had passed since the first public demonstration of anaesthesia and the field is continuing to evolve in the present day. Despite these, the role of anaesthesiologists is viewed behind the screen of other specialties that we support, and behind the mask from our patients. Our National Anaesthesia Day is no doubt a powerful advocacy tool to educate the general public, celebrate and reinforce our roles in global health. We're asked to give a brief account of the first national level celebration in Penang and what better way than to incorporate it to the overdue National Day 2019 report from Penang.

REMINISCING THE FIRST NATIONAL ANAESTHESIA DAY 2001, PENANG

From records available, the first national level National Anaesthesia Day on 13th - 16th October 2001 was the second time Anaesthesia Day was held in Malaysia; the inaugural event was organised by University Malaya Medical Centre at its premises in 2000. The idea of celebrating a national level celebration in Penang was mooted when I was approached by B Braun Malaysia for a community corporate social responsibility project for the community on Penang Island as its factory was and still is situated on the island. At that time, Anaesthesia Day was held for the first time the year before in Great Britain which aimed to raise the profile of the profession and educate the general public in understanding the medical field of Anaesthesiology. The novel idea was proposed to Dr Ng Siew Hian, the then Head of Department of Anaesthesiology & Intensive Care, Hospital Pulau Pinang. This made us the third country in the world to celebrate National Anaesthesia Day, after Australia and Great Britain.

Opening Ceremony

The theme "Your Safety is the Anaesthesiologist's Prime Concern" and a logo designed by Dr Ramdzan Mohd Jamil, depicting the anaesthesiologist's hand holding a facemask during induction of anaesthesia were our starting point. Fourteen sets of bilingual posters, educational pamphlets and promotional stickers were printed and distributed to all major state hospitals in the country which carried out state levels celebrations either concurrently or over the next few weeks. This model of state and national level celebrations is continued until today.

The venue of public exhibition in the then popular Bukit Jambul Shopping Complex over three days with organised public participation (e,g, invited secondary school children) proved to be a hit as a mock operation theatre complete with anaesthesia machine, airway equipment, manikin, IV drip, fake/simulated anaesthesia medications and physiologic monitors was created. It was officiated on 13th October 2001, by YB Dato' Dr Chua Jui Meng, the Minister of Health, Malaysia of the day. Other ignitaries were the late Dato' Dr K Inbasegaran (Head of Service, Ministry of Health Malaysia), Dato' Dr Azmi Shapie, Penang State Director of Health, Dr Ng Siew Hian, Organising Chairperson and Dato' Dr Jahizah Hassan, Organising Co-chair. Other attractions were poster exhibition, CPR station, public quiz, video show, tissue and organ donation campaign, blood sugar check, blood pressure check, primary school children colouring competition, secondary school children essay competition and clown shows.

A public forum and high tea reception were help on 13th October 2001 at another venue at Berjaya George Town Hotel. It was attended by 350 invited community groups. The speakers were Dr Ng Siew Hian, Dr Ramdzan Mohd Jamil and Dr Nurul Huda Tan who spoke on various topics that interest the public an anaesthesia care. A pre-forum survey undertaken showed 37% of 335 respondents did not think or were unsure if an anaesthesiologist were a medically qualified doctor.

Organising Committee at Work

Public Forum

Public Exhibition and Interactions

In character of future anaesthesia day celebrations, a Fun Run was held on 14th October 2001 from Polo Ground to Youth Park. There were T-shirts, prizes and lucky draws for the 200 enthusiastic participants consisting of health care providers and members of the public. In addition, a live telecast talk show on National TV2 with Professor Datin Dr Norsidah Manap as guest speaker in the evening of 14th October 2001 was held.

We have kept some photos and newspaper cuttings. It has been wonderful looking at our younger selves and remembering our seniors who contributed much to the growth of our specialty.

Fun Run

Newspaper Cuttings

Materials

NATIONAL ANAESTHESIA DAY 2019, PENANG

True to Hospital Pulau Pinang tradition, the day started early with a pumped-up Zumba session, led by our energetic nurses. Member of our department of all categories, from the staff nurses to consultants joined in, displaying some pretty sassy moves. The gasmen and gasladies know how to have fun, sans nitrous oxide.

Following this, were the formal speeches and the officiating ceremony. Dato' Dr Norsidah Ismail, our then pengarah, officiated the ceremony for the last time, prior to her retirement. An informative multimedia presentation in line with the theme of "Resuscitation Saves Lives" was then presented, handiwork of Dr Eric our very own techno savvy specialist. It was a definite crowd-puller and impressive show.

Another significant tradition of our department was the coloring contest, held one week prior, participated by the paediatric oncology patients. Seeing these excited kids beaming with pride upon receiving recognition was a truly priceless moment. It's moments like these, that remind us of why we sacrifice ourselves to provide the best of medical care. Many booths were setup along the foyer including a mock setup of the operation theatre and cardiac bypass pump demonstration by the perfusionist team. Free medical screening booths were set up as well by our dedicated clinic team.

The CPR station was the loudest, with both medical personnel and the public trying their best to perform high quality CPR, cheered by the onlookers. Our cheeky anaesthetic medical officers were flexing their muscles, and even kept a scoreboard of the best CPR performance. Not forgetting our Pain clinic booth, staff with the unicorn themed Pain-free insta-frames were answering queries from visitors cheerfully.

Every year, we look forward to our celebration every year. On this one day we proudly put our anaesthesia machine out for public display and engage the public in

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Masks of Different Sizes

University Malaya Medical Centre
by Dr Sarah Aliah Mohd Azman

As we work towards Malaysia's recovery after several stages of movement control order, let us all say our gratitude to having survive yet another challenging phase of our lives. Not to mention, a very unique time which we can all narrate to the younger generation one day.

Moving out of our isolated, government-endorsed caves into a slightly more social everyday life (slightly more, but with certain standard operating procedures involved), I cannot help but notice the varied masks people wear in public. Commonly worn are the 3-ply surgical masks with the ones that go around the ears. The ladies in headscarves would then creatively style the side loop extensions with a pin or a hairclip making it a more secure fit. The simple basic idea has then evolved into the making of mask extenders created with pearls, colorful bands or wooden extensions. This new accessory immediately gained popularity among the younger crowd. As for the fashionistas, luxurious masks are now in trend. These masks are made out of wearable fabric which had Swarovski beads sewn on each piece, heavily promoted in different colors by famous designers. Some minorities would even go to great lengths by wearing masks made for chemical warfare with side air filters for ventilation.

As for us healthcare workers, the constant battle of wearing a 3-ply surgical mask or an N95 mask when attending to patients of unknown COVID-19 swab status is eminent. The hunt for the precious box of masks would deem as the first challenge of the day. Monitored by the head nurse or team leader in the operation theatre (OT), surgical masks would be commonly placed in the furthest drawers or highest cupboards of a locked room. Not to mention, the hunt for the limited N95 face mask would be even more challenging, if the need to wear it arises!

The surgical masks are made of nonwoven fabric created using a melt blowing process which came into use in the 1960s, replacing cloth facemasks. It is designed to prevent infections in patients and preventing transmission of liquid droplets and aerosols from person to person. The mask has 3.0 Microns of Bacteria Filtration Efficiency Standard (BFE). The N95 mask, on the other hand, is made up of an electrostatic non-woven polypropylene fiber. It removes 95% of the 0.3 Microns of Most Penetrating Particles (MPPS), thus making N95 ideal in preventing transmission. Some variants are designed with a valve which reduces breathing resistance during exhalation. The mask has a good seal and better protection resulting in high demand.

As for the public, the choice of masks reflects more on individuality and perspective. Everyone view the pandemic differently, and thus react to it differently. Wearing a mask that feels right and that suits us is more like a coping mechanism in us adjusting to the new norm. It is a statement of ensuring safety with a touch of individuality. We are faced with a different kind of challenge as we recover from the wave of COVID-19 chaos. Each of us cope with this phase in our lives differently with challenges that come our way, be it employment, deployment or unemployment. The struggle is real.

Everyone is facing an individual challenge in recovering from the disease that has affected us globally. Economies are being re-built, finances redistributed, direction of healthcare re-evaluated, and brands restored. The world is slowly trying to get back on its feet and learning to stride again. Along with the stride, we still retain our affects - our individuality. Our individuality which is expressed through a cover that protects us, hides our worries yet signifies hope - our masks.

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non-consultative roles. We promote awareness of the pivotal role of anaesthesia in providing healthcare for all and will continue to do so for many years to come. We wish to express our sincere gratitude for unfailing support of the Malaysian Society of Anaesthesiologists for our annual event.

Anaesthesia Day 2019

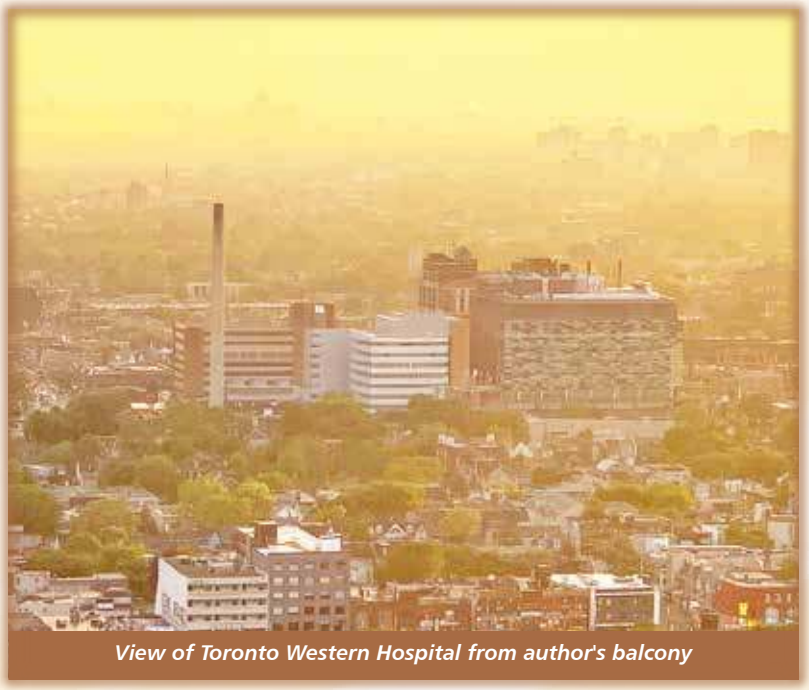
TORONTO WESTERN HOSPITAL, CANADA - MY EXPERIENCE AS A NEUROANESTHESIA FELLOW

by Leong Kok Weng

Neuroanesthesia - CMRO2, Cerebrovascular Reactivity, Burst Suppression and Much More!

Ever since my post-graduate training, I was drawn to the field of neuroanesthesia. The ability to manipulate the various physiological parameters to achieve tight cerebral homeostasis while the surgeon is operating on it, and the ability to wake the patient up (without even bucking on the ETT!) with intact neurological function after brain surgery particularly fascinated me. Our three-years neuroanesthesia sub-specialist training consisted of two years of local training and one year of overseas training. For my overseas training, I am fortunate to be accepted to a clinical fellowship position in Toronto Western Hospital - a very competitive position.

Toronto Western Hospital (TWH), more fondly known as 'the Western' by Torontonians, is one of the world's top centres in neuroscience, renowned for its large volume of neurosurgical cases and cutting-edge procedures. It is affiliated with the University of Toronto, which has recently been ranked as the world's 6th top university in medicine in 2020. TWH has a humble beginning in 1895 as a public dispensary, but has progressed to become one of the busiest hospitals in downtown Toronto. As of late 2019, it has 272 beds and sees about 60,000 emergency department visits a year. In this write-up, I report my year long experience as a neuroanesthesia fellow at TWH from 1st February 2019 to 31st January 2020.



View of Toronto Western Hospital from author's balcony

Start of a Journey of a Lifetime - Pre-Entry Assessment Program (PEAP)

The first month of fellowship was spent under PEAP, which is essentially a work-based assessment of international medical graduates (*i.e.* doctors with specialist degrees from outside of Canada). During this PEAP period, the new fellows were listed in the same operating room (OR) with the professors and staff anesthesiologists, where our clinical competency and communication competency were placed under tight scrutiny. This was the period where we work in close proximity with the staff anesthesiologists, getting to know them (and for them to know us), as well as for us to familiarize with the hospital systems. Fellows who have passed the PEAP were expected to be competent and able to function as independent anesthesiologists.

A 'Normal' Working Day of a Neuro Fellow

The day as a neuroanesthesia fellow actually started the day before, when the operating room (OR) assignment for the following day was emailed to us, usually by 4.00pm to 5.00pm. Upon receiving the surgical particulars, I would log into the hospital's online system, where patients' pre-meds (which were already done in 'pre-admission clinic' *i.e.* the anesthesia clinic), surgical notes, as well as imaging and blood works were reviewed. It was expected of the fellows to formulate an anesthetic plan beforehand and, if issues were anticipated, to discuss among the neuro fellows, with the professors, or with staff anesthesiologists. After dinner, literature review would ensue where I would read around the topics, as well as to reflect on the cases that I have done on the day.

Fellows were usually already at the hospital by 7.00am. After changing into scrubs, I would start to prepare the OR for the day. Of note was the fact that there were no 'GA nurses' in the Canadian national health care system. As a result, the anesthesiologist was solely in-charge of all aspects of anesthesia care, including OR preparation (drugs preparation, setting up IV drips and infusions, preparing the arterial line and CVP transducer set, monitoring, ETT cuff, and airway equipment), induction and maintenance of anesthesia, and emergence. The only help a fellow could get was either from the scrub nurses (who assisted us for the anesthesia or when there was no emergencies), or from other anesthesiologists. This has deep

implication on my clinical practices, as I have learnt to always plan ahead (things move more efficiently when they are planned/anticipated ahead). Besides that, being able to administer anesthetic drugs while manually bagging the patient, taping the ETT, setting and securing IV and arterial line with minimal help have also taught me never to be dependent on others.

Depending on the complexity of the cases of the day, preparing a neuro room would take somewhere about 20 to 30 minutes. By 7.40am, we would greet the patient in the holding ('pre-op') area, where the pre-anesthesia assessment was done. In the OR, prior to anesthesia, we would perform a final 'surgical pause' where, when the patient is still conscious, the surgical and anesthesia team would brief the team (and the patient) regarding the procedures and expected difficulties. Patient will then be anesthetized, and the case will proceed. At the end of the case, instead of keeping patient ventilated in the ICU, it was expected that most patients were extubated in the OR, unless there were compelling reasons not to. Furthermore, there was always a 'debrief' session at the end of every case, where the surgical and anesthesia team will discuss any shortfalls in the surgery, and identify any room for improvement. In between cases, we would have 15 to 20 minutes during OR turnover, where we would have our short breaks and to freshen up. Due to the high-stake nature of intracranial or spine surgeries, it was a norm for the neuroanesthesia fellows to complete the OR they were assigned to, instead of passing it over to colleagues who were doing other fellowships. This would mean finishing the work past 5.00pm, and often at 6.00pm - 7.00pm. During fall or winter, where the daylight is short (sunrise at 8.00am and sunset at 5.00pm), this would mean we wouldn't see the sunlight for the whole week. During oncall duty, we would be on academic work till 3.30pm, after which we would enter the OR to run the emergency cases.

Academia at TWH

Besides clinical duty, the fellowship was also packed with academia. We would have general fellow rounds every Monday at 7.00am (occasionally Thursday at 4.00pm), neuroanesthesia rounds every Thursday at 7.00am, grand rounds every Friday at 7.30am, and professor rounds every two weekly at 5.00pm (usually on a Monday). The rounds were often chaired by the 'big names' in anesthesia (not only neuroanesthesia) - such as (Drs) Frances Chung, Venkatraghavan, Anahi Perlas, Peter Slinger, Vincent Chan, Richard Brull and others. Besides that, there were frequent interdepartmental rounds (such as neuroradiology rounds with interventional radiologists, neurocritical care rounds with intensivists, and neurosurgical rounds with neurosurgeons). We were also required to carry out at least one interventional study during the fellowship, and incentives (such as academic days and sponsorship) were given for writing scientific articles or presenting in international conferences. Publishing scientific journals was definitely a breeze at TWH, as we have full access to journals onsite in the hospital, and there were in-house research fellows and statisticians who helped to formulate the study protocol and analyse the data. Furthermore, the professors' doors were always open, and they were very forthcoming with sharing their experience/wisdom if approached.

Our Favourite Time of the Week - Friday 'Fellow Rounds'!

After a busy week, our most anticipated day of the week would be Friday, where, after work, the fellows (and sometimes joined by the professors) would join-in for the 'fellow rounds' at nearby café or pub. This was the time we keep up our social networks, venting out all the stress we acquired at work, and get to see the human side of the fellows. This was also the time for us to listen to the experiences of the fellows - who were from many parts of the world.

Neuro 'fellow rounds' at a cafe in Kensington Market (author: left 2)

Opportunities Abound!

There are a wide variety of neurosurgery services provided in TWH, covering all aspects of neurosurgical and stroke care. These include tumour surgery, skull base surgery, cerebrovascular surgery, functional neurosurgery, neurointerventional radiology, and major spine surgery. Of note, awake craniotomy (for mapping of eloquent cortex), functional neurosurgery (*e.g.* deep brain stimulator implantation, mapping and resection of epileptogenic foci - both of which are done under awake setting), cerebrovascular surgery (*e.g.* AVM resection, aneurysm clipping, carotid endarterectomy, intracranial bypass procedures), as well as minimally invasive spine surgery (*e.g.* minimally invasive microdiscectomy and minimally invasive multilevel transforaminal interbody fusion) - all of which are rare in our local settings, were done in great regularity at TWH. More astonishing, many of the neurosurgical cases were being done as daycare

setting. This would include awake craniotomy, open brain tumour biopsy, minimally invasive spine surgery, AVM resection, and even open clipping of cerebral aneurysm - provided that they were carefully selected. Besides that, neurointerventional radiology were a major player at TWH, providing services such as emergency endovascular therapy (EVT) for acute stroke, carotid artery stenting (CAS), and vertebral augmentation (kyphoplasty and vertebroplasty) - all of which were still unheard of in some parts of Malaysia. There was also a dedicated intraoperative neuromonitoring department, providing neurophysiological monitoring for the majority of cases at TWH.

Author with Dr Bill Middleton - the previous anesthesiologist in-chief

Besides these 'routine' neurosurgical services, TWH is also constantly innovating - where new treatment modalities are being explored. The new modalities introduced at TWH in year 2019 alone include MRI-Guided Focused Ultrasound Surgery (MRgFUS), where specific intracranial targets are localized under MRI and then ablated using focused ultrasound, and robotic neurosurgery - where intracranial surgeries are being performed via robotic arm. This provided the neuroanesthesia fellow with the opportunity to oversee and manage the anesthesia aspect of these cutting-edge procedures.

At TWH, there were never a shortage of opportunities to be part of the scientific breakthrough. As a neuro fellow, among my proudest moments at TWH was to successfully anesthetize a 93 year-old WWII war veteran for awake craniotomy (the oldest patient awake craniotomy at TWH) - who was subsequently discharged home as daycare, and to anesthetize the world's first robotic coiling of basilar tip aneurysm, the procedure of which was widely publicized in the Canadian and world media. At the end of my fellowship, I have logged in a total of 232 neurosurgical and spine cases, which I have anesthetized independently.

Good Things to Take Home

Other than the vast clinical experiences, there were several things worth taking home. For one, healthcare at TWH is much more patient-centric and holistic. When a patient presents for surgery, several teams came together to manage different aspects of care, such as patient's own general practitioner, neurologist, neurosurgeon, anesthesiologist, pharmacist, physiotherapist, rehabilitation physician, social worker (sometimes psychiatrist) - and they were involved at an early stage of the surgery (often during surgical planning) and continued well after patient's discharge. This is in oppose to our local setting, where their involvement was often at an *ad hoc* basis. Furthermore, the healthcare system has been designed for optimum efficiency. Patients were given 'pre-admission package' during their surgical clinic visit, where it contained information covering all aspects of surgery, such as hospital map, amenities, recovery roadmap, common complications, hotline and so on - so that they were well prepared for the surgery. Besides that, there were ample use of checklists so that we did not miss any information (even their GA form contains several checklists), and there were use of various 'stops' throughout the surgery where any team members could voice out their concerns. Besides that, all stakeholders were constantly communicating. If there were many surgical concerns regarding the upcoming case, the staff surgeon (or fellow) often make it a point to inform the anesthesiologist, and likewise, we often communicate our anesthesia concerns (via phone or via mail) regarding upcoming cases to the staff surgeons, and they often acknowledge our concerns. This, although is present to a certain degree in our healthcare system, should be emphasized even more. Finally, the doctors' well-being was very well taken care off. For example, after any crisis (*e.g.* intraoperative peri-arrest, failed intubation, or after patient complaint), the fellows involved were taken off work for the day, and their assignments were taken over by other fellows or staff anesthesiologists.

Halloween gathering at one of the professor's homes

Epilogue - a Perfect Storm is Brewing

All in all, fellowship in TWH requires a lot of hardwork but definitely rewarding. The vigorous training and the experience gained working at TWH has realigned my focus to be more forward looking, and has definitely shaped my clinical practice in the future. As I was concluding my fellowship, news has started spreading in social media about a new deadly influenza illness originating from a wholesale market in Wuhan - which was later named COVID-19. I was grateful that my family and I have returned home safely in a timely manner, just before it has escalated to a world epidemic.

My Tiny World

by Dr Loy Yuong Siang

Photography, just like medicine, is divided into multiple specialised fields for example, landscape, portrait, sport, wildlife, street, aerial and others.

I have been shooting starting from my secondary school days and, since then, had been fascinated by a world not normally noticeable human under normal condition, the world of macrophotography.

Macrophotography (though *macrophotography* technically refers to the art of making very large photographs), refers to close-up photography, usually of very small subjects and living organisms like insects, in which the size of the subject in the photograph is greater than life size. Macrophotography can have many different subject groups, such as still life, nature and others. I am mainly into natural macrophotography with my subjects photographed within their natural habitats.

Compared to other branch, macrophotography is one of the cheapest branches of photography. It does not require traveling to different places for landscape or nature photography, expensive lenses for sport / animal photography, paying for models for portrait photography, etc. Macrophotography only require a macro capable lens, one or more flashes and a lot of patience. It can be taken basically anywhere - in front of the house, in a garden or even the road side. All it requires is for us to slow down our pace and start paying attention to our surroundings.

Below is a butterfly taken in a piece of deserted land next to my current hospital back when we were not too busy. While waiting for the next case to happen, this was taken.

When I started taking macrophotography, I began by trying to take pictures of extremely enlarged subjects. That time, the motto was "the bigger, the better!". After a while, I realised that mere enlargement and clarity does have an initial WOW factor, but it does not make a picture worth looking at again after the initial wow.

I then considered making the pictures that would worth a second look by factoring color, contrast, and depth of field control in order to infuse some feeling into my pictures, hopefully they will be worth a second look.

All the above photos were taken in their natural environment with the available light. The incorporation of flash(es) into macrophotography enables the photographer to change the light and the contrast on the whole picture. This is way easier than other field of photography due to the close distance of the subject and the narrow field of view.

By using close-up flashes, one can almost disregard the available light on the subject. For example this picture below was taken around 5.00pm. With one off camera close-up flash from the left upper corner of the flower, the cluttered background of the usual spider lily bush can be hidden in the shadow.

By controlling the light distribution, the curve and color of the subject can be highlighted and the background can again be hidden in the shadow.

Using two flashes, I managed to photograph this little butterfly in front of my house around midnight. One light to illuminate the subject from the left corner, another one directly above the butterfly to add the rim of light on the wings

Changing the setup of lights, I shot these two butterflies within the same vicinity to include some background color.

Macrophotography has taught me many things. Among which are patience, persistence and the ability to view the world from another perspective. It also taught me to slow down my pace in life to appreciate the nature more. One of my favorite quotes is "the world looks better when we slow down our pace".

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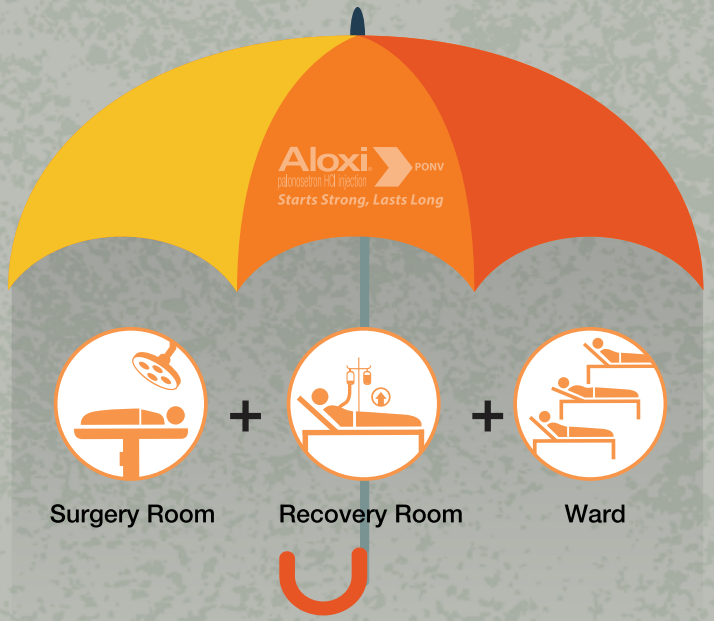

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Safety and effectiveness of Aloxi® in neonates (less than 1 month of age) have not been established. Postoperative Nausea and Vomiting Studies: Safety and efficacy have not been established in paediatric patients for prevention of postoperative nausea and vomiting. Overdosage: There is no known antidote to Aloxi®. Overdose should be managed with supportive care. PHARMACEUTICAL PARTICULARS: Incompatibilities: This medicinal product must not be mixed with other medicinal products. Shelf life: 5 years. Upon opening of the vial, use immediately and discard any unused solution. Special precautions for storage: Protect from light. Store below 30ºC. STORE OUT OF THE REACH OF CHILDREN. PRODUCT REGISTRATION HOLDER: Mundipharma Pharmaceuticals Sdn. Bhd, A-3-01, Level 3, Block A, PJ8, No 23 Jalan Barat, Seksyen 8, 46050 Petaling Jaya, Selangor, Malaysia Under licence of Helsinn Healthcare SA, Switzerland. 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References: **1.** Candiotti KA, et al. Anesth Analg. 2008;107(2):445-451.2. **2.** Kovac AL et al;Anesth Analg. 2008;107:439-444. **3.** Malaysia ALOXI® Approved Package Insert, August 2017. **4.** Gan TJ, et al. Society for Ambulatory Anesthesia. Anesth Analg. 2014;118(1):85-113.

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BIOLs' Day Out: International Port Dickson Olympic Distance Triathlon

by Dr Hanapi Mohd Tahir

It is no use tossing and turning to catch 40 winks. It is 5.00am and time flies so fast, I would not even realise that things will have started. Furthermore, that constant pinging of WhatsApp messages from Nordin saying "Bangun! Bangun! Bangun!" followed by jovial responses from other teammates nailed my fate: No more rest for the wicked. Did I get enough rest last night? ... it does not matter now. "It's do or die, there is no try in Tri". We had to be ready for the big event: International Port Dickson (PD) Olympic DISTANCE Triathlon 2020.

As nerve-wrecking as it is especially after the two failed attempts in the past two consecutive years (DQ: disqualified and DNS: did not start) and my recent failure in completing the 4km swimming In Langkawi Swim Fest, it is also as important for me to live up to the team's "Bring It On Lads! (BIOL)" spirit… after all I was one of the founding members of the team five years ago. Even the newest member, Suresh Kumar (Eskay) has performed beyond expectation. So, after the dawn prayer (solat subuh), I put on the adhesive tattoo on my right forearm and made sure all the necessary equipments are accounted for in the sling-bag. Thankfully, this time I have the foresight to load my road-bike (RB) and essential items into the car the night before and wifey volunteered to drop me off at the event site, Avillion Admiral Cove PD. This certainly has taken away some of the anxiety. I had a quick bite of peanut butter sandwich and a few sips of a ceffeine laced energy drink. This should provide the energy needed for the 1.75 kilometre swim. The caffeine is just enough to increase my agony threshold throughout the event… too much caffeine might upset my myocardium that could re-ignite the rate(exertion)-related left bundle branch block (RRLBBB) that has been in remission for almost a year. Though there is no discernible abnormality in cardiac structural or electrical conduction, it is still a factor that would hinder me from finishing the course since it reduces my effort-tolerance. The reason behind it, I postulated, with the LBBB there is an inefficient septal contraction, hence affecting cardiac output. That is a cause to worry. That will definitely stop me from finishing the event.

During the short drive, I could not help to reflect on the amount of training time I have put in. Transitioning from explosive functional fitness training (Crossfit-like) to long distance endurance sport certainly is not easy. Due to the type of training that involves a lot of Olympic lifting, short sprint of running and rowing and other explosive movements, I have developed muscle mass 60% of bodyweight, much of it is type 1. I am bulky for my height (a politically correct way of saying my BMI is encroaching the obese category… hey, check out The Rock's BMI score, then you know what I mean). In the world of triathlon, the athletes are mainly lean with loads of type 2 muscle fibres, which are more desirable since it is best suited for long steady endurance movement with high threshold of fatiguability. The difference is in the number of mitochondria in the muscles. Making things more daunting for me is the fact that I only managed to acquire swimming skills and endurance after two years of training, unlike SK, Nordin, Marlizan and Aktar who acquired the skill in short duration of time while Faizi has already acquired the skill since young. I could not help thinking about the near-drowning incident in Putrajaya lake and near-total laryngospasm incident in PJ Palm pool when I accidently inhaled water while training with a snorkel. That incident in PJ Palm really was a hard one: I almost quit…. Struggling with the agony of the inability to breathe albeit for a few seconds was enough of a reality check of what this swimming business really is: you could die. There was a sudden silence from every pool user, the lifeguard almost jumping into the water and patrons in the pool-side restaurant were standing at the table gawking, wondering who had died this time…. Well, of course there is some element of exaggeration there, but that was the level of embarrassment. This incident does not befit a person with my social standing, I thought: I save lives, you know, in my daily living activities. Not a hippo-clown in the water. The wound was still fresh, but the coach had to add more salt to it: after bringing me to the shallow end of the pool he warned me with his thick Spanish accent, "Hanapi, this is only 3 feet deep, don't drown here". Evidently, he was struggling to keep that laugh from bursting! That's that. Another thing is, I am 51-year-old this year! What in the world am I doing? I should be enjoying a blissful middle age life like any successful career man would do, like going on vacations to Paris, Costa del Sol, etc or like getting a sports car (Aston Martin DB 11 comes to mind) and with that I could hit on a young female nurse or whoever (male and transgender excluded) that readily drools at the sound of

the horsepower engine… on the contrary, I chose to slog physically on activities that could even risk my neck, literally. This is the very definition of BIOL in Malay: crazy, mad, nutter… that would be the six of us, and hundreds or even thousands more middle age men who are involved in triathlon globally, so much so, we are the age-group that sustain this triathlon sport. We make up the majority of the participants that give the organisers their profit. That is the force to be reckoned with. And I like being part of that force, especially when it empowered us to steer the economy towards health and wellness and not for the pure capitalist-hedonist whims and fancies only. Furthermore, I like to be healthy, disease-free and strong physically and mentally in my "mature" (like cheese) age. Many of us also enjoyed looking good, have the build and posture of a young man or even looking younger than our age, like that everlasting boyish look SK and Marlizan are enjoying, to prove my case. I must admit though, on top of all the above-mentioned, I am hooked on the exhilaration of the nett effect of hormonal-cocktail rush coursing through my veins throughout the event: the oxytocin of camaraderie, the dopamine of accomplishment, the adrenaline of crisis and stress and the endorphins of activities. This is even better than the "downer" effect of opioids and "upper" effect of ketamine, combined (not that I have had it, mind you… that is my opinion based on observing hundreds of patients I gave anaesthetics to and account from drug rehab inmates). So, there: the benefit of exercise/sports. They did not coin the term "Exercise is Medicine" for nothing, you know.

We reached the event site in less than 10 minutes. Ample time at hand to rack-up my RB, arrange my sports-nutrition bars and gel, shoes, socks, towel, helmet and all, neatly. I am fully aware that, despite being this neat, when I get here after the swim and cycle, these stuff will look like it had been hit by a tornado. But it helps to calm my nerves before the horn is blown. Zen-calm before the storm. The extra time I had also is used for some dynamic warm-up before walking briskly to the swim start-point.

At the beach, I almost cried in happiness and relief when my prayers for relatively calm water is answered. Two years ago, I was disqualified for failing to complete the swim leg in the choppy washing-machine-like water, in which, there were two fatalities among well-trained triathletes, so much so, swimming with a safety buoy become mandatory this year. But it is also a bit of a let-down since the low tide has receded the water so much that it would mean we would have to walk at least 150m before reaching the swimmable depth of the sea. Oh well… that is an advantage, nonetheless, for a weak swimmer like me. The atmosphere at the starting point was electric. People were bubbly and chatty especially when cameras were pointed at them. Even the slight lightning in the sky made them smile ear to ear thinking that was the camera flash going off at them.

I searched for my teammates. Faizi and Eskay were confident. I thought Eskay's confidence this time was partly contributed by his newly bought colourful flashy expensive-on-sale trisuit. Nordin was trying to look cool sipping his favourite energy drink. Marlizan was looking at the sea… did I notice a hint of concern there in his face? He did admit that he lacked swim training time.... at least, I have a friend in you there, Lijae. And where was Aktar? As usual, he would pop-up confidently just seconds before flag-off. He was probably doing what most seasoned athletes would do: proper warm-up and psyching up self to focus on the challenge ahead. Aktar and Faizi admittedly are our gurus in triathlon since both have completed even longer distance triathlon, namely half-ironman distance and full ironman distance, locally and internationally. Naturally, they are our consultants in triathlon. Thank God, we did not have to pay consultant's fee.

The swim leg was flagged off every 10 minutes in waves according to age-group: younger first, older last. Females after the grand oldies. Nothing to do with allowing the oldies to have the last gawk at the girls before the "storm". It was all about the safety of contestants. Faizi, Eskay and I were in the same group because we are in our 50s (though Eskay will soon contribute to the WHO statistics of The Gerries (geriatrics). Aktar, Lijae and Nordin obviously have a 10-minute headstart since they are still in their forties…. Soon enough guys, in due time.

It was not unusual for an international event in Malaysia such as this to have to suffer from poor time-management compliance. Blame it on the VVIP. They are a part of the event and they are not part of the event. But who cares? It means more time for camera-posing and gawking at the female athletes in tights.

As the horn was blown, there was a thunderous roar of sound: the sound mixture of war cry (excitement and anxiety) and splashes of water being hit by different levels of body mass indexes. I quickly reminded myself the strategy I have cooked up last night, that have contributed to my listless sleep: "my race, my pace", not to be carried away by the excitement of racing because this could be a recipe for disaster… breathlessness can create panic in the water, which in turn will consume too much energy and inability to finish the race. I mumbled that mantra until I reached swimmable depth of the sea. Some athletes did dolphin-dive, which after 100m, proved to be a mistake, since many became breathless and panicked… thank God for the safety bouy around their waist which they quickly grab hold to calm themselves down. As the water hit my face, it was exhilarating…this is the reason why I did not quit swimming. The feeling is a mixture of anxiety, control and freedom. Sea water smells, well, like sea water, with a tinge of diesel smell and taste. Faizi and Eskay disappeared before me in just 10 seconds. They probably had dolphin for their forefathers.

The swim went well. I felt comfortable, strong and in control. No missed beats felt. Based on my previous stress test, it would signal ventricular ectopics which heralds LBBB. Most importantly, I did not get kicked in the face by breast-stroker swimmers which may dislodge my goggle which in turn could lead to a disastrous outcome. Coming out of the water was a delirious experience. I felt like Daniel Craig aka James Bond coming out of the sea in Casino Royale. It must have been the diesel in the seawater I have swallowed.

However the elation did not last long when I realised that not many bikes are left in Transition 1 (T1). The rest of the BIOL team members must have cycled off at least 15 minutes ago. Damn. That deflated my balloon. I quickly changed into my bike attire and got on my bike, remembering not to pedal too fast at the beginning as it will drain my energy and can certainly affect the run leg. This is the time to refuel with my energy bars while cycling at comfortable pace. I have also timed my smartwatch to refuel every 30 minutes interval as to prevent 'bonking' episodes from low glucose.

I was used to this bike route but tended to forget that climbing the hills can be quite a challenge after the 1.75km swim. I also had to remind myself not to get too excited about other athletes overtaking me… "My race, my pace." I kept telling myself. At the 20-km mark, I saw Nordin by the roadside. I shouted to him to get his butt on the bike again, but I did not look back. I simply sped off. I would not wait to miss this chance to overtake him. After all, I am a stronger cyclist than him, I still think. But where is Marlizan? He usually cramps at km 20 after a swim… But admittedly, his endurance level is better than mine and he had a 10 minutes head start anyway. Never mind Aktar. He has grown so strong and improved so much from a breathless 'Michelin Man' to a lean mean cycling machine especially on that RM20K+ Kouta time-trial (TT) bike, and he is probably running the 10-km leg already. Faizi was also on a TT bike and cycling is also his strength, so he is probably on the running leg also. Eskay, despite a near-Gerrie status, has improved by leaps and bounds in cycling even though he rarely cycles before taking up triathlon. It must be due to the training up and down Ulu Langat - Perez legendary route. He also has made a remarkable improvement in swimming, from zero-to-hero kind of improvement within a few months since starting triathlon not more than a year ago. Such a talented person. One thing about cycling that he has in common with Faizi is that they both have a broken clavicle. Could it be that having a broken clavicle made them more aerodynamic on the bike? That is one hypothesis I do not want to test.

About 2-km from Transition 2 (T2), feeling strong, I sped onwards making sure that Nordin will not make a comeback at me.

This year, I decided not to wear a triathlon-suit (tri-suit) even though it will save me about 5 minutes or so of race time. A t-shirt and a pair of running pants will do fine to also hide my excess flab and it was more comfortable than a tight tri-suit under the heat of the scorching sun.

As I ran out from T2, Nordin called out for me to wait… Hey where did he come from? … I thought… Ah what the heck, I will just have to run faster than him. But he easily caught up. This was about the only time why I hate long-legged men. Not even 1km of running, I have already started to experience ventricular ectopics, and it was getting more frequent, so I had to slow down. Nordin asked, "why are you slowing down?" I said, "It's my ticker" "Kan aku dah bagitau jangan laju sangat…" "It's ok, it will improve when I slow down, you go on ahead."

The ectopic / missed beats did disappear after I slowed down and walked. Time to change my running plan if I plan not to use my medical insurance plan. Instead of continuous running, I opted for a run-walk strategy, that is one minute of walking and four minutes of running throughout the entire 10km distance. After 5 kilometres, especially running on the beach sand, this interval is further reduced to two minutes walking and three minutes running. I just wanted to reach the finish line in one piece. With that strategy, I managed to keep my heart rate to about 150-160 bpm without any ectopics experienced. Plus, many youngsters who could run faster were left behind using this tactic, because it will leave you still strong to finish the entire 10km stretch after 1.75km swim and 40km cycling.

Having crossed the finish line, I felt wonderful. I was happy to see my other half egging me along. I heard Aktar and Nordin shouting "Kona Napi!"… or did they? Or was it just in my mind, being delirious in my efforts to reach the finish-line. They have finished well over 15 minutes ahead of me. As I crossed the line, Nordin directed me to the refuelling station and I opted for some Cornetto ice cream handed to me by my wife. I was parched but exhilarated for finishing the OD triathlon for the very first time, despite the problem with my rate-related LBBB. It has taken about one year since diagnosis of the condition for me to keep it in remission. This condition, though not related directly to coronary heart disease, the electrophysiology of the heart does bother me due to the chest discomfort associated with it, limiting effort tolerance. I have learnt that there is no treatment for it but is amenable to metabolic conditioning… That is avoiding arrhythmogenic foods and beverages, adequate hydration, nutritional supplementation, judicious exertion, adaptation to exercise volume and most importantly is rest and recovery.

This type of event is tough. I finished last. Last in the team, and last few in the age-group category. But I did not enter to win. I entered to challenge myself, physically and emotionally. And I did not lose. Losing means to quit. Sports imitate life. There are so many problems encountered in the process of training and during the event itself. And like many well-trained and experienced anaesthetists, it is only natural to provide solution to the problem lists. Come to think of it, it is the same as giving anaesthesia to patients in term of that "long hours of boredom, moments of terror" kind of aspects in our professional life. Ask any of the BIOL's team members, and they will agree.

Involvement in any sport, not necessarily triathlon, certainly has medical and anti-aging benefits. It reduces the risk of frailty at older age, reduces stress, increases focus, and keeps the family together by having 'race-cation' (race / vacation) together as a family (if you endure the initial silent treatment from a certain family member hehehe…).

Will I do it again despite the physical suffering, risks and time sacrificed spent in training? You bet. All the BIOL members have registered for the Desaru Half-Ironman event in April 2021. And the distance is more than double that of the OD. That is the spirit of *BIOL* (not the Malay slang for crazy, mad, etc…) but to "Bring It On, Lads!"

My last word to you: Embrace challenge. Do not limit your challenges. Challenge your limits. Because straight roads do not make skilful drivers. Be BIOL.

The BIOL triathletes are practicing anaesthetist around Malaysia who in their spare time juggle between business, livestocks and their "therapeutic" triathlon disciplines. We welcome you guys to join us "boogaloo 'till we puke" in any of the disciplines.

Real World Evidence Shows Accelerated Surgery in Patients with HIP Fracture has Substantial Benefits

Dated 9th February 2020

Kuala Lumpur - Sunday, 9th February 2020 - University of Malaya, in collaboration with McMaster University, Canada, have discovered that accelerated time to surgery (within an average of six hours after a hip fracture diagnosis), resulted in a lower risk of delirium, urinary tract infections, reduction in pain, faster mobilization, and a shorter hospital stay compared to standard care (when surgery occurred an average of 24 hours after a hip fracture diagnosis).

The HIP Fracture Accelerated Surgical TreaTment And Care tracK (HIP ATTACK) Trial, published in *The Lancet*, involved 2,970 people at 69 sites in 17 countries, including Malaysia. University Malaya Medical Centre (UMMC) and Penang General Hospital (PGH) were the Malaysian research sites.

Ten years ago, Professor Dr PJ Devereaux, principal investigator of the HIP ATTACK trial, was consulted to manage a 73-year-old female with a hip fracture who also had an elevated troponin level. The referring doctor felt that the patient's heart issue had to be treated first before the hip fracture surgery could occur. Despite the best of intentions, the patient died before she was able to undergo surgery. Upon reflection, Professor Dr Devereaux wondered if the prevailing need to medically optimize patients before hip fracture surgery was the wrong approach.

He contacted Dr Mohit Bhandari, an orthopedic surgeon in Hamilton, to get his perspective. He told Professor Dr Devereaux that observational studies suggested that shorter time to surgery may prevent death and major complications in patients with a hip fracture. Based on this evidence, they initiated a large randomized controlled trial to understand the effects of accelerated surgery in patients with a hip fracture. Professor Dato' Dr Wang Chew Yin, Consultant Anaesthesiologist of University of Malaya, a long-time collaborator with Professor Dr Devereaux, was invited to be a part of this research.

They found that accelerated surgery did not result in a reduction in death or a collection of major complications. However, patients randomized to accelerated surgery had a lower risk of delirium, urinary tract infection, moderate to severe pain, and were faster to stand, mobilize, and go home compared to patients randomized to standard care.

Among patients who had an elevated blood test (troponin) demonstrating heart injury when they presented to the hospital with their hip fracture, accelerated surgery lowered the risk of death compared to standard care.

"Hip fracture is a medical emergency that, if not treated urgently, will result in patients languishing in despair and pain while awaiting surgery. Many of these patients will develop complications and have poor outcome, including death," said Professor Dr Wang. "With this collaborative multinational research, it is now clear that in many cases, hip surgery should be prioritized to improve health of patients and reduce the overall burden on the Malaysian health care system."

This study was made possible by a grant from the Hamilton Health Sciences Corporation. The Malaysian Hip Attack investigators, led by Professor Dr Wang, were Professor Dr Chee Kok Han, Associate Professor Drs Lai Hou Yee, Loh Pui San & Chaw Sook Hui, Drs Khor Hui Min, Tan Kit Mun, C Sankara Kumar, Simmrat Singh, Li Lian Foo & Komella Prakasam of UMMC and Dr Lee Meng-Li of PGH.

Perioperative Medicine: A Perspective from Western Australia

by Dr Leena Nagappan

I developed a keen interest in Perioperative medicine fairly soon after obtaining my fellowship in anaesthesia. When the opportunity was given to lead the perioperative services at my elective satellite hospital, I decided to take it on and develop it further. Perioperative medicine is a unique limb in the practice of anaesthesia. Whilst every anaesthesia fellow practices it in their daily work, there is an entire unexplored territory that can be pursued; resource permitting.

Main areas of focus involve prioritizing patient optimization before elective surgery. It ranges from better control of chronic health problems such as Diabetes Mellitus, to improving nutrition and physical conditions. Emerging data is showing significant associated morbidity when taking an unoptimized patient through major surgery, especially the elderly population. There are under-recognized conditions such as frailty and cognitive decline, all of which are vulnerable to decompensation if unaddressed prior to a huge stress on the body during the perioperative period. Question is, how to we do this and where is the line to balance patient optimization and appropriate timing for surgery?

Five years ago, I introduced a pathway that incorporated a Comprehensive Geriatric Assessment for elderly patients planned for Elective Lower Limb Arthroplasty surgery. To facilitate screening of preoperative patients for frailty, cognitive dysfunction and complex medical conditions; collaboration with a dedicated group of geriatricians was paramount, who were then able to thoroughly assess and address these issues prior to surgery. While navigating around a complex system of referrals and advanced investigations was challenging, once established, the flow was smooth and the results encouraging. Morbidities such as postoperative pulmonary complications and delirium started to decline, and consequently we observed improvements in standard predictors such as length of hospital stay.

Although Perioperative medicine is currently gaining traction in both the surgical and medical spheres, we as anaesthetists seem to be ideally placed in the patient's perioperative journey to lead this field. No other perioperative team member is directly involved with the various surgical specialties as we are, which allows us an overarching view of perioperative practices. The niche exists for us to link surgical and medical specialties, such as cardiology and respiratory medicine. We are also well connected with allied health and nursing teams, where interventions such as prehabilitation and patient blood-management is possible. We can promote lifestyle interventions such as weight loss and smoking cessation pathways; at the opportune moment during preoperative clinic assessments.

Extending into the management of patients during and after surgery, we have a role in major decision making, such as goals of care. Our planning for anaesthesia and surgery also involves elements of type and extent of surgery, postoperative disposition and interventions, as well as rehabilitation and pain management. We are familiar with acute hemodynamic changes and the endless analgesic medications available. Our input in the postoperative setting is paramount, and often sought after during a patient's stormy recovery. We have a role in making this a part of postoperative patient care, and doing what we do best - predicting risks and implementing preventative strategies.

It is more than likely that all of the above is ingrained in the daily practice of most of our diligent colleagues in anaesthesia. I myself draw the inspiration from some very passionate consultants when I entered the specialty. What I hope is to inspire more members in anaesthesia to pursue the field of Perioperative medicine further. After all, we are now the specialty of Anaesthesia, Pain and Perioperative Medicine.

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8. Celebrating Ramadhan during MCO, 20th April 2020 (Menyambut Bulan Ramadhan Dalam Tempoh PKP)

9. All Ministries Must Decide Based On Health Expertise, 15th April 2020 (Keputusan Semua Kementerian Perlu Berdasarkan Pandangan Pakar Kesihatan)

10. Additional Measures During MCO Phase 3, 11th April 2020 (Langkah Langkah Tambahan Sepanjang Tempoh Fasa Ketiga PKP)

11. Ensuring Adequate Numbers Of Health Professionals, 8th April 2020

12. Public-Private Partnership (PPP) To Fight COVID-19, 5th April 2020

13. Strengthening Health Expertise In Government Decisions, 2nd April 2020

14. Holistic measures against COVID-19, 28th March 2020 (Langkah-Langkah Holistic Menentang COVID-19)

15. Act Now On COVID-19, 25th March 2020 (Bersatu Menentang Secara Tenang, Rasional Dan Mantap)

16. A Strong, Calm and Sensible Response To The Corona Virus Out Break, 25th March 2020

17. A More Coherent Government Response, 20th March 2020

18. Health System Must Focus on Both COVID-19 and NCDs, 3rd June 2020

19. Prioritise Childcare for Healthcare Workers, 28th May 2020

20. Extension of CMCO and Hari Raya Aidilfitri Celebrations (including a Bahasa Malaysia version), 12th May 2020

21. Transition into CMCO with Caution

22. Extend MCO Over Hari Raya Period, 8th April 2020

23. Women, Professionalism and Doraemon in the time of COVID-19 (including a Bahasa Malaysia version), 3rd April 2020

24. AMM Against Ramadan Bazaar, 1st April 2020

25. A message especially for you, if you have recently returned to Malaysia, 31st March 2020

D. In tandem with all educational establishments, the College's had to make decisions of unprecedented scales.

   - The cancellation of the Annual Scientific Congress 2020 in view of the directive that no mass gathering is allowed until recently
   - The postponement of the Annual General Meeting as directed by the Registrar of Societies
   - The rescheduling of almost all planned SIG and CPD events to 2021
   - The postponement of training workshop and training of trainees / trainers for the parallel pathway programme

E. The pandemic will necessitate the need for us to reassess how we deliver training and conduct examinations in the future. As I am writing this, the College Council is planning to hold the first formal meeting through the video conferencing platform.

F. We remained open albeit remotely during the Movement Control Order to support our colleagues through this perilous time. Are we physically open now?

Our specialty and our College are very much at the forefront of the management of this pandemic. I am exceptionally impressed and proud of the work from our medical officers, trainees, our specialists and consultants. They have been the foundation in delivering care at the frontiers in this war against the COVID-19 pandemic. The pandemic has galvanized all anaesthesiologists to one common purpose.

It is impossible to predict the course to the end of the pandemic. It remains a likely probability that COVID-19 will be with us for some time to come. The College remains committed to ensure that all members of our fraternity are updated with the latest evidence base reports and practices in handling, treating and anaesthetizing patients in the COVID-19 era. The recommencement of old practices i.e. physical meetings, conferences, and invited foreign speakers remains as work in progress as we settle into the recovery phase of the movement control order. We remain committed to work in close association with the Ministry of Health Malaysia as they spearhead policies and guidelines for the vast majority of the healthcare workers in this country.

I am humbled by the support and the camaraderie exhibited by my council members as they tireless discharged their duties in coming together for the greater cause as custodians for the fraternity. I am thankful for the cohesive support by all members of our fraternity. I thank God for the blessings bestowed to all and I pray for the continuous protection for one and all.

Message from the President of the College of Anaesthesiologists, AMM

Dato' Dr Hjh Jahizah Hj Hassan

We are living in extraordinary times. I am pleased to be able to write my message from the desk of the President of the College of Anaesthesiologists, Academy of Medicine of Malaysia as we welcome the Recovery phase of the Movement Control Order. I pen this with the hope that I will be the first and hopefully the only president who has to face the war on a pandemic in our modern history.

Our country was steadfast in the face of calamity as we were insidiously dealt with the arrival of the infectious novel COVID-19 pandemic at our shores. We witnessed the swift implementation of Movement Control Order in an attempt to flatten the infection curve. Citizens were restricted to the confines of their homes. All but essential workforces were at home. Social and religious gatherings of any size were banned. Social distancing is the accepted decorum in public. We witness the swift arrival of the new norm.

As the nation was adapting to the new ways of live, the medical fraternity was thrown deep into the conundrum of formulating while simultaneously implementing various guidelines and policies for safe practices at the time of the pandemic. Our fraternity was at the forefront, caring for the most severe form of COVID-19 cases alongside the intensivists at the Intensive Care Units whilst providing anaesthesia for the COVID-19 patients undergoing emergent operative procedure.

Our healthcare system suspended all elective activity at most public hospitals. However, anaesthesiologists were still involved in the provision of anaesthesia for semi emergency procedures and care of the critically ill non COVID-19 patients throughout the pandemic. Suffice to say, anaesthesiologists maneuvered all terrains of difficulty and challenges with exemplary standards of professionalism.

A. We witness remarkable collaboration between the public and private sectors alongside the spirit of voluntarism as retired and private anaesthesiologists came to help at all possible locations that needed help in these unprecedented times. The College takes pride in facilitating the above by responding to this need by developing a response team of anaesthesiologists been sent to the dedicated COVID-19 hospital, namely Hospital Sungai Buloh and Non Covid Hospitals like National Cancer Institute (IKN), Putrajaya.

B. From the College's workstation, timely implementation of guidelines and advisories were made available for the perusal and guide for all its members. These advisories were in tandem to the recommendation by the Ministry of Health Malaysia.

To enumerative:

1. Recommendations for Management of Anaesthesia and Intensive Care Services in Preparation of Worsening of the COVID 2019 Pandemic

2. Guidelines for the management of patients presenting for surgery during the COVID-19 pandemic

3. Collaboration with the National Resuscitation Society of Malaysia, for CPR in COVID-19 pandemic

C. As a College of the Academy of Medicine of Malaysia, the College of Anasthesiologists had the privilege to endorse the many press statements released by the astute Academy on its own and as part of Malaysian Health Coalition (MHC) as early as March 2020.

1. Stay Vigilant During Recovery MCO, 10th June 2020

2. Public Health Policies must be Inclusive And Durable, 1st June 2020

3. Celebrating Hari Raya Aidilfitri in the New Normal, 21st May 2020 (Menyambut Hari Raya Aidilfitri dalam Kebiasaan Baharu)

4. Lead Malaysia With Consistent Public Health Policies, 9th May 2020 (Terajui Malaysia Dengan Dasar Kesihatan Awam Yang Konsisten)

5. Planning For Phased Restart, 4th May 2020 (Rancanagn Pembukaan Semula Secaraber Peringkat)

6. Non-Citizen Health Is A Public Health, 29th April 2020 (Kesihatan Bukan Warganegara Ialah Isu Kesihatan Awam)

7. Strategies for the Post-MCO Period, 23rd April 2020 (Strategi Pasca-Perintah Kawalan Pergerakan)

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