



**KETUA PENGARAH KESIHATAN MALAYSIA
DIRECTOR GENERAL OF HEALTH MALAYSIA**
Kementerian Kesihatan Malaysia
Aras 12, Blok E7, Kompleks E
Pusat Pentadbiran Kerajaan Persekutuan
62590 PUTRAJAYA

Tel : 03-8883 2545
Faks : 03-8889 5542
Email : anhisham@moh.gov.my

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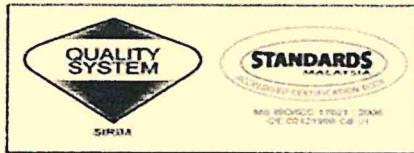
SEPERTI SENARAI EDARAN

YBhg. Datuk/Dato'/Datin/Tuan/Puan,

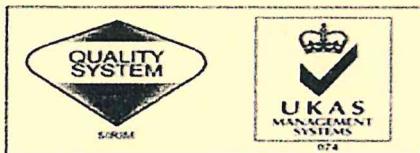
GARIS PANDUAN BAGI PENGENDALIAN PEMBEDAHAN KECEMASAN DAN SEPARA KECEMASAN SEMASA WABAK COVID-19 DI HOSPITAL KEMENTERIAN KESIHATAN MALAYSIA (KKM)

Dengan segala hormatnya saya merujuk kepada perkara di atas.

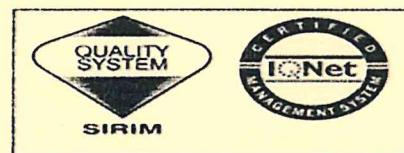
2. Pandemik COVID19 telah diisyiharkan oleh Pertubuhan Kesihatan Sedunia (WHO). Di Malaysia, bilangan kes jangkitan COVID19 semakin meningkat dan ini telah menyebabkan peningkatan beban tugas di kalangan anggota kesihatan di hospital dalam mengendalikan rawatan pesakit-pesakit yang terlibat.
3. Bagi memastikan penyampaian perkhidmatan yang berkesan, terutamanya bagi kes-kes pembedahan kecemasan dan separa kecemasan semua pihak hendaklah bekerjasama dan menggalas tanggungjawab sebagai satu pasukan, dalam pengurusan kes-kes ini di hospital. Bersama-sama ini disertakan **Garis Panduan Bagi Pengendalian Pembedahan Kecemasan Dan Separa Kecemasan Semasa Wabak COVID-19 Di Hospital Kementerian Kesihatan Malaysia (KKM)** untuk tindakan selanjutnya.



CERTIFIED TO ISO 9001:2015
CERT. NO. : OMS 01897



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CERT. NO. : QMS 01897



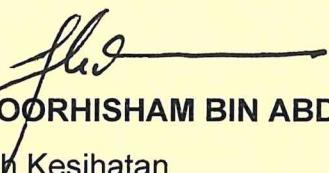
CERTIFIED TO ISO 9001:2015
CERT. NO. : MY-QMS 01897

4. Kerjasama daripada pihak YBhg. Datuk/Dato'/Datin/Tuan/Puan adalah sangat dihargai dan dialu-alukan.

Sekian terima kasih.

“BERKHIDMAT UNTUK NEGARA”

Saya yang menjalankan amanah,


(DATUK DR NOORHISHAM BIN ABDULLAH)

Ketua Pengarah Kesihatan
Kementerian Kesihatan Malaysia

s.k

Ketua Setiausaha
Kementerian Kesihatan Malaysia

Timbalan Ketua Pengarah Kesihatan (Perubatan)
Kementerian Kesihatan Malaysia

Timbalan Ketua Pengarah Kesihatan (Kesihatan Awam)
Kementerian Kesihatan Malaysia

Timbalan Ketua Pengarah Kesihatan (Penyelidikan dan Sokongan Teknikal)
Kementerian Kesihatan Malaysia

Pengarah
Bahagian Perkembangan Perubatan

Pengarah
Bahagian Kawalan Penyakit

Pengarah
Bahagian Perkembangan Kesihatan Awam

Semua Pengarah Kesihatan Negeri

Semua Ketua Perkhidmatan
Kementerian Kesihatan Malaysia

“RINGKASAN EKSEKUTIF”

**PANDUAN BAGI MENJALANKAN PEMBEDAHAN KECEMASAN DAN SEPARA
KECEMASAN SEMASA WABAK COVID-19
(VERSI 1.0)**

1. Pembedahan perlu dijalankan dengan mengamalkan sepenuhnya langkah-langkah *Universal for Airborne, Droplet and Contact Precaution*.
2. Semua pesakit yang akan menjalani pembedahan khususnya melibatkan *Aerosol Generating Procedures* (AGP), perlu dilakukan penilaian berkenaan:
 - a. Sejarah pesakit (Contoh: pernah ke luar negara, kontak rapat dengan pesakit COVID19 yang positif, demam, selsema, sesak nafas dan sebagainya)
 - b. Penilaian Klinikal (tanda dan gejala COVID19 terutamanya pneumonia dan sebagainya)
 - c. Penilaian Pengimejan (*sign for Pneumonic changes*)
 - d. Ujian Darah (FBC, CRP, LFT, RP, *Coagulation, Blood Culture* dan sebagainya)
3. Ujian saringan PCR bagi COVID19 dijalankan bagi setiap kes.
4. Walaupun keputusan ujian saringan COVID19 akan mengambil masa, penilaian 2 (a) – 2 (d) diatas mestilah dibuat dengan teliti dan pembedahan perlu diteruskan dengan penggunaan PPE seperti berikut:
 - a. *N95 mask*
 - b. *Isolation Gown (fluid-repellent long-sleeved gown) with plastic apron*
 - c. *Gloves*
 - d. *Eye Protection (goggles / face shield)*
 - e. *Shoe Cover*
 - f. *Head cover*
5. Pada masa akan datang, sekiranya terdapat *Point of Care Antigen Kit* (yang diluluskan oleh KKM), kesemua pesakit perlu disaring menggunakan kit tersebut. Namun begitu, ujian secara PCR perlu dijalankan.

GUIDELINES FOR MANAGEMENT OF SURGERY DURING COVID-19 PANDEMIC PERIOD

Objectives

- To limit exposure of patients and staff to COVID-19.
- To limit only essential surgery and procedures (including Anaesthesia, ORL, Ophthalmology, Dental and Endoscopy) due to close proximity of the healthcare provider with the patient's source of viral load in the nose and pharynx.

Justification

- COVID-19 is a transmissible disease spreading via viral particles in respiratory droplets, contaminated surface through contact (direct and indirect). It can also be transmitted via airborne after certain Aerosol-Generating Procedures (AGP).
- Studies have shown that virus shedding is high even among asymptomatic carriers.
- Viral load is high in upper respiratory tract especially from nasopharynx and oropharynx. Any surgery, procedures or endoscopy involving the upper aerodigestive tracts well as high-speed drilling procedures will put the surgeon and other healthcare workers at risk for exposure to aerosolized viral particles.
- Guidelines from authoritative bodies worldwide, such as College of Surgeons of Malaysia (CSAMM), American Association of Otorhinolaryngologists and Head-and-Neck Surgeons (AAO-HNS), British Association of Otorhinolaryngology (Ears, Nose and Throat) and Head and Neck Surgery (ENT UK), etc., have advised to stop all elective surgeries and endoscopic procedures.
- Due to the dynamic nature of the pandemic situation, the recommendations are meant to be refined over time based on the latest availability of evidence and guidelines, and should be evaluated over case-by-case basis with feedback from subject matter experts over the duration of the crisis.

Emergency Surgery Recommendations

- All procedures and surgeries performed should follow Standard Precaution together with Transmission Based Precaution (Contact, Droplet and Airborne Precaution).

- **All patients** undergoing emergency operations require thorough clinical assessment and **COVID-19 diagnostic tests via RT-PCR for nasopharyngeal/throat swabs as per local hospital protocols.**
- All staff involved during the procedure / surgery should be wearing the appropriate PPE according to current guideline issued by the Ministry of Health, Malaysia.
- High risk procedures and surgeries, especially AGPs, should be performed in standard procedure room or operating room (preferably negative pressure rooms, where available), with doors closed and the least number of experienced personnel involved.
- If patient is not intubated, a surgical mask should be offered to the patient to wear at all times.
- In dire emergent situations where the COVID-19 status cannot be ascertained within limited time, the surgery should be continued with Enhanced Airborne Precautions as per COVID-19 positive cases; point-of-care test kits should be utilized where feasible apart from the COVID-19 diagnostic tests using RT-PCR.
- Post-operatively, in all confirmed COVID-19 positive cases, **heightened post-operative care** should be provided. These include but not limited to:
 - Extubation in negative pressure room (where available)
 - Patient nursed in isolation ward with attending healthcare workers in full PPE as per guidelines
 - For tracheostomised patients, special tracheostomy care encompassing consideration of delaying tracheostomy tube cuff deflation, in-line closed suctioning system, Heat Moisture Exchanger (HME) attachment to tracheostomy tube, delaying tracheostomy tube change until COVID-19 negative, etc.

The following factors should be considered as to whether the surgery should proceed¹ :-

- Urgency of the procedure.
- Collective decisions between the surgeon, anaesthetist, patient, and other related healthcare professionals.
- Availability and supply of Personal Protection Equipment (PPE) to the local healthcare facility.
- Staffing availability.
- Bed, ventilator and Intensive Care Unit (ICU) requirement of the post-operative patient versus the local COVID-19 pandemic needs.
- Blood-product transfusion requirement of the patient.

- Health and age of the patient, as well as other medical comorbidities, given the risks of concurrent COVID-19 infection in the perioperative period.

Aerosol-Generating Procedures (AGPs) [according to UK Public Health Guideline]

The following procedures are currently considered to be potentially infectious AGPs for COVID-19:

- intubation, extubation and related procedures, for example manual ventilation and open suctioning of the respiratory tract (including the upper respiratory tract)
- tracheotomy or tracheostomy procedures (insertion or open suctioning or removal)
- bronchoscopy and upper ENT airway procedures that involve suctioning
- upper gastro-intestinal endoscopy where there is open suctioning of the upper respiratory tract
- surgery and post mortem procedures involving high-speed devices
- some dental procedures (for example, high-speed drilling)
- non-invasive ventilation (NIV); Bi-level Positive Airway Pressure Ventilation (BiPAP) and Continuous Positive Airway Pressure Ventilation (CPAP)
- High Frequency Oscillatory Ventilation (HFOV)
- induction of sputum (cough)
- high flow nasal oxygen (HFNO)

***The overall suggested algorithm for Surgical Case Management is as in Appendix A.**

References

- College of Surgeons of Academy of Medicine, Malaysia (CSAMM) Guidance [27 March 2020]
- American Academy of Otorhinolaryngology and Head-and-Neck Surgeons (AAO-HNS) Statement [26 March 2020]
- United Kingdom Intercollegiate General Surgery Guidance on COVID-19
- ENT UK Guidelines
- European Rhinologic Society Guidelines
- Ministry of Health, Malaysia Guidelines for Recommended Personal Protection Equipment (PPE) [25 March 2020]
- Centres for Medicare & Medicaid Services (CMS), United States of America, Adult Elective Surgery and Procedures Recommendations

OVERALL ALGORITHM FOR SURGICAL CASE MANAGEMENT

