

RACS guidelines for the management of surgical patients during the COVID-19 pandemic

Introduction

The COVID-19 pandemic presents a unique challenge to patients requiring surgical services, and to the surgeons, anaesthetists, nurses and other staff who provide those services.

People will continue to require surgical care during the pandemic. The risk COVID-19 presents to patients and to healthcare workers means many patients will be disadvantaged, and all patients and healthcare workers are at increased risk.

The practice of surgery has always required balancing the risks. Currently the risk of spreading COVID-19 to patients and to healthcare workers is substantial. This risk greatly outweighs the risk from delay treating all but the most urgent surgical conditions.

The Australian Department of Health and the New Zealand Ministry of Health have COVID-19 resources and advice relevant to each country and in Australia each state and territory does also. Our hospitals, jurisdictions and in New Zealand, district health boards, have regionally relevant resources and guidelines.

The Australian Government has developed an app which holds all of the relevant COVID-19 information. Download via [Apple App Store](#) or [Google Play](#).

A rapid review of resources with respect to surgery and COVID-19 is being undertaken by RACS ASERNIP-S.

Further guidelines and advice will be posted on RACS COVID-19 information hub as changes are made.

Key points about COVID-19 transmission

1. COVID-19 is a highly contagious disease caused by the coronavirus SARS-CoV-2.
2. Transmission of COVID-19 can occur from asymptomatic people.
3. Transmission of COVID-19 is primarily by droplet, fomites and for surgeons, aerosolisation – touching, talking, coughing, sneezing.
4. Aerosolised COVID19 survives on surfaces for many days.

Principles guiding surgical management

These principles apply during periods where authorities have substantially limited movement of the population and required businesses to close or work from home in order to control community spread of COVID-19:

1. Emergency operations will still be necessary for patients with acute, life-threatening conditions. Precautions with Personal Protective Equipment (PPE) appropriate to the patient's COVID-19 risk (if known) must be used (see COVID-19 precautions in the operating theatre).
2. Urgent operations (Category 1 in Australia and Non-Deferrable in New Zealand) will be required for patients who will come to harm if delayed more than 4-6 weeks. Depending on the availability of full PPE, a slightly lower level of PPE may be acceptable for those patients who are COVID-19 negative and have a very low risk of having been exposed to the virus so that full PPE is conserved for use with higher risk cases.
3. Where possible, operations for all other patients should be deferred. There is no justification to perform any procedure that can be deferred for six weeks without risk of significant harm to the patient.
4. Opt for non-operative management wherever possible.
5. Select procedures that minimise the risk of resource consuming complications. For example consider making a stoma rather than an anastomosis in co-morbid patients.
6. Outpatients:

- a. all referrals should be triaged and appointments deferred whenever possible.
 - b. when referral letters do not contain sufficient information, the referrer should be contacted, complete information obtained, and appropriate investigations collated prior to a triage decision being made
 - c. outpatient appointments for patients with urgent conditions (Category 1 or Non-Deferrable) should be offered or deferred taking into account the risks of COVID-19 transmission, the risk to the patient from the condition suspected from the referral information, and the availability of staff.
 - d. wherever possible, consultations should be undertaken as teleconsultation (phone or video).
7. During this escalating phase of the COVID-19 pandemic it is important that the resources of private hospitals are available to support public hospital services if they become overwhelmed. Private hospital patients who experience complications can consume public hospital resources, especially intensive care. For both these reasons, it is important that no non-urgent elective surgery is undertaken at private hospitals during any period of 'lockdown'. Private hospitals may be in a position to provide a relief valve for urgent procedures in non-COVID-19 infected patients from the public and the private sectors. Patients and procedures should be carefully selected based on absolute need (i.e. life-threatening conditions only), risk of complications, and safety of staff.

COVID-19 precautions in the operating theatre

1. The following patients are regarded as high risk for COVID-19
 - a. Positive test for COVID-19
 - b. Close contact with a confirmed case of COVID-19
 - c. International travel within the last 14 days
 - d. Any of the following symptoms:
 - i. Sore throat
 - ii. Cough
 - iii. Shortness of breath
 - iv. Fever > 38C
2. At least 15% of patients are asymptomatic
3. Identify high risk COVID-19 patients pre-operatively. All should have a Chest Xray (or better, CT Chest whenever any other CT is required, particularly CT Abdomen- include chest on requisition).
4. The number of people in the operating theatre should be kept to a minimum
5. Conversation should be kept to a minimum
6. The operation should be consultant led with no, or one trainee or registrar
7. PPE training/sign-off should be undertaken as prescribed by your hospital or jurisdiction i.e. watch recommended videos and attend PPE training session.
8. Minimum PPE will be recommended by your hospital/jurisdiction. PPE for surgery may include a regular surgical mask for low risk operations or well-fitting face mask (N95 or FF2/3 respirators for high risk cases), eye protection (goggles or visor preferred), full hair cover, impervious gown, and gloves x 2. Also consider impervious foot and ankle cover.
9. PPE should be removed carefully using a sterile technique, and face and hands washed with soap and water. (PPE training)
10. The operation will take longer due to COVID-19 PPE requirements
11. Consider a second surgeon or team back-up for long complicated operations due to fatigue, dehydration
12. You should shower as soon as reasonable and when you get home remove footwear outside, keep footwear separate, take work clothes off, shower and wash clothes separately from family's clothes.
13. Particular caution must be taken during Aerosol Generating Procedures (AGP). Appropriate filters and extraction systems should be used to minimise aerosolization. There are many circumstances in the operating theatre where aerosolization can occur, including:
 - a. Any activity around the oropharynx, including face-mask ventilation, endotracheal or oropharyngeal intubation, extubation, nasogastric intubation.

- b. Energy based haemostasis devices: Diathermy, laser or ultrasonic plume. Only use with suction
- c. Bone saws, drills, burrs, and nibblers. Use guards, screens, suction-exhaust systems
- d. Laparoscopic venting – use suction, no free or filtered venting
- e. Wound irrigation – Use a closed system if possible.

Surgical specialties

Each specialty will have its own special requirements and may develop own recommendations. These will be shared on the [RACS COVID-19 information hub](#).