6 April 2020

GUIDELINES IN THE MANAGEMENT OF PAEDIATRIC PATIENTS IN THE COVID-19 ERA.

INTRODUCTION:
There are many guidelines which already exist with recommendations on the management of surgical conditions in the COVID-19 area; some are relevant to paediatrics. Most of you will have already seen many of these and selected ones are provided below. Any guideline produced today will need to be considered in the light of the evolving pandemic as it impacts on your local hospital with the resulting consumption of resources including beds and staff. It is acknowledged that these recommendations not only need to take into consideration measures to contain the spread of COVID-19 infection but also the likelihood that resource limitations may begin to impact on our usual approach to the management of specific paediatric conditions requiring us to alter normal practice and even consider non-surgical options. In hospitals which have a shared paediatric and adult service the effect of the pandemic may be different to those which are stand-alone paediatric hospitals. For this reason, these recommendations are by necessity brief and generic but continue to echo the principles as defined by RACS.

RECOMMENDATIONS FOR SURGICAL PROCEDURES.
All non-urgent surgery has been suspended in both Australia and New Zealand in an attempt to conserve resources (including PPE and surgical supplies), ensure capacity as the number of COVID-19 infected patients increase as well as protect both patients and staff from the risk of COVID-19 infection. Only Category 1 and urgent Category 2 cases should be done however there is conjecture amongst our fraternity as to what cases this may include. As an overarching principle consideration should always be to not cause the patient harm by delaying surgery. Where disagreement may exist as to whether a case should be done discussion with the Head of your department would be prudent. In the unlikely event this fails to provide a resolution the ANZAPS Executive may be able to advise accordingly. Be mindful that those cases considered elective today may become urgent and a mechanism to review patients at 3 months is recommended. Attached is the American College of Surgeons guidelines for Paediatric Surgery (see below) which has tried to define what is appropriate to do at this time. To this list should be added the management of burns and obstructed kidneys/bladders.

Accepting that non-urgent procedures will most likely remain deferred for at least 3 months or longer, the following guidelines refer specifically to emergency and urgent or semi-urgent paediatric surgery. Standard practice for the assessment and management of these cases should be maintained; acknowledging that different jurisdictions may have different approaches. Be familiar with your local hospital approach however this is evolving so keep up to date.

It is prudent to assess all emergency and semi-urgent cases by questionnaire looking at travel, symptoms and contacts. For semi-elective procedures, this should be considered 24 hours prior to surgery. Routine testing of asymptomatic patients prior to surgery is not presently recommended.
The overuse of PPE for cases where it is not indicated runs the risk of using up valuable resources. Follow the guidelines of your hospital.

Patients will still be requiring procedures during this time and this obligatory work load will need to be accommodated efficiently and safely. Acknowledging every case needs to be considered on its merits, but also accepting the possibility or presence of COVID infection our management choices should aim for resolution of the disease with minimal morbidity and return to function. This should be achieved with as short a stay in hospital as possible and a minimal risk of complications. Consideration must be given to medical, hospital and equipment resources. Consideration must also be given to avoiding creating problems for later; so that appropriate timely surgery is performed (again in the context of local needs and resources).

Certainly, consideration should be given to non-operative management of certain clinical cases such as fibrinolytic therapy for empyema; drainage of abscess under local anaesthetic etc where the treatment offered is comparable to standard clinical practice.

OPERATING
In the operating theatre, the number of personnel must be kept to a minimum. We would not recommend medical students being present at this time. Surgical personnel should not be in the operating room with the patient either at intubation or extubation when aerosolization can be an issue. Surgical procedures should be led by a surgical consultant or senior registrar/fellow to minimize risk to junior staff and improve theatre efficiency. Where there is suspected or actual COVID-19 infectious risk, PPE must be appropriate as per your local jurisdiction. Some procedures carry higher risk of aerosolization. Surgical plumes from diathermy or other energy devices require appropriate filtered venting. Minimally invasive procedures have been allegedly reported as carrying a higher risk and care must be taken with use of appropriate filters and extraction systems. Currently we do not believe minimally invasive approaches should be avoided but appropriate care must be taken. The review by Associate Professor David Cavallucci “Optimal surgical approach during the COVID-19 pandemic” is worth reading in this regard.

OVERALL RECOMMENDATIONS:
1. Be aware of your local hospital, state and national COVID 19 policies. Check the RACS guidelines regularly. As this is rapidly evolving stay current.
2. Be proficient in applying and removing PPE. Attend training at your local hospital. Encourage hospitals to supply appropriate PPE.
3. Be aware of equipment which may increase spread; minimize diathermy plume, aerosalisation with the use of Versajet, gas venting with laparoscopic procedures.
4. Do not harm your patients by not offering timely and appropriate treatment. Note laparoscopic procedures appear appropriate to be undertaken but be aware of the concerns. (see David Cavallucci paper)
5. Be respectful of each other and your junior staff, as this is a time of great stress and anxiety. Manage stress and fatigue amongst all staff.
6. Regularly check in on your junior staff, both their physical and mental wellbeing. Have a discussion about personnel health and if your own or junior staff have health issues (eg immunosuppressed) consider removing them from frontline service.

7. Notify ANZAPS if employment problems arise at your hospital as they can advocate for senior and junior staff should they have jurisdictional issues re work conditions and payment.

8. Minimise risk exposure to junior surgical and other staff; now is not the time to have them learning how to operate. All surgery should be undertaken by consultants or senior registrars.

9. Have a management plan for your department; split the team and quarantine groups to avoid cross contamination.

10. Have a management plan for your outpatient referrals; triage and manage appropriately. Document outcomes and arrange for a follow up in the coming 1-3 months. Where possible use Telemedicine.

11. Be prepared to help out; this may involve working in a field that is not your own. In this crisis, you may be required to assist in primary patient care. Smaller units may need to consider contacting larger units in their state if they develop staffing issues.

Please also refer to the RACS Coronavirus Information Hub for ongoing daily updates.

Incl: attached documents

Mr Guy Henry F.R.A.C.S.
President
Australian and New Zealand Association of Paediatric Surgeons (ANZAPS)