"From the Trough"

Perioperative Interest Group Notes

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Website: www.perioptalk.org

The imperfect opinions in these reports are only meant to stimulate discussion:- they should not be considered a definitive statement of appropriate standards of care.

TOPIC 1: ***Obesity and developmental delay, booking information.***

A 56year old gentleman presented for excision of lower leg SCCs and skin grafting. There had been minimal information on booking form apart from box ticked indicating requirement for clinic assessment. Multiple comorbidities:- Fragile X Syndrome (developmental delay) with morbid obesity (161 cm 162kg, BMI 62), hypertension, OSA, insulin dependent T2DM. Patient had a general anaesthetic using LMA 12 months ago. Recent portal vein thrombosis and transient acute kidney injury (now recovered). More recently, an admission with cellulitis in leg associated with SCCs (hence surgery). Leg is very oedematous.
Questions: - What anaesthetic management?
Discussion: - Regional anaesthesia should theoretically be possible but would be technically challenging and would require patient co-operation. Realistically GA may be the only option. But why is the surgery necessary? …The recent infective episodes have been resistant to treatment. The general practitioner support is very competent, and homecare have been very attentive, but they are now pressuring for surgical treatment to clear the source of infection. This patient will present significant risks, but the need for surgery is understood. Haemoglobin found to be 78g/l and patient has had ongoing PR bleeding since warfarinisation after portal vein thrombosis. This needs to be investigated and need for transfusion of iron therapy clarified. The surgery will have to wait pending this, but then surgery may proceed under GA, accepting inherent risks.

The 'real issue' is the need for more information about patients to be provided at time of booking. A project to modify the RFA (Request for Admission) form is underway, with a major focus being to increase reliability of gaining more information about the patient's medical and social circumstances, and to give a "heads up" if the consultation is likely to be difficult or prolonged. This was entirely foreseeable with this patient.

TOPIC 2: **Malignant Hyperthermia Susceptibility – Management for delivery**

A 27 year old Primiparous Female has a predicted susceptibility to malignant hyperthermia based on a paternal great uncle, have been tested and diagnosed as MH susceptible. Her theoretical risk of susceptibility is 12.5%. She is otherwise well but concerned about appropriate management at the time of delivery. She is hoping to deliver vaginally, but if needs a Caesar would prefer a spinal anaesthetic.
Question:- What instructions should she be given & what arrangements made?
Discussion: - She can have a conventional regional, or a non-triggering general anaesthetic if necessary. But the 'danger' is an unprepared emergency. Preparation for possible general anaesthetic must focus on ensuring that the midwives and the anaesthetist(s) on duty at the time of her admission are aware of her condition in advance, and are prepared to give a non-triggering emergency anaesthetic in the unlikely event that this was needed. Current guidelines suggest this should include carbon filters on the anaesthetic machine, (although some question the validity of this.) She is already registered with the HARD Data-base but did not have a copy of her full report (This was provided.) In addition to the full HARD Report, an alert should be entered on the hospital system (CAP). This should be sufficient.

TOPIC 3: ***Group and Screen Criteria***

A patient for a laparoscopic nephrectomy was prepared through the clinic and proceeded to surgery without a valid group and screen. At present open or laparoscopic nephrectomy both qualify for group and screen. There was no need for blood transfusion in this case; however it was agreed a G&S should have been done.

Note:- A review of the local criteria for group and screen is underway, based on consideration of the 'totality of risk' associated with proceeding to surgery without a group and screen, recognising that this may occasionally lead to need for transfusion with O Negative or Group-only matched blood. This review may reduce indications for G&S; but there are many other cases currently having group and screen that would be regarded as not requiring G&S before nephrectomy.

TOPIC 4: ***Changes in colonoscopies***

Traditional polypectomy during colonoscopy is performed using a snare with hot wire diathermy to the polyp stalk. Recent trials have found that a cold snare reduces the risk of delayed bleeding. The procedure involves cold snare removal of the polyp, observation for bleeding and application of a clip to the polyp stalk if there is significant ongoing bleeding. Diathermy at the time of removal causes less initial bleeding, however there is then an increased risk of infection at the site of the diathermy burn, resulting in increased incidence of secondary bleeds. This includes polypectomy for patients on warfarin. A recent trial showed that for small colorectal polyps it is appropriate to leave the patient on warfarin and perform a cold snare. The "backstop" in this situation is that Warfarin can be reversed with prothrombinex or FFP in the event of a problematic bleed. Management of patients taking NOACs is problematic as rapid reversal is not possible (except for Dabigatran). Hence most will continue to cease NOAC anticoagulants prior to a colonoscopy when a polypectomy is planned. On the basis of these findings, some proceduralists performing colonoscopies are changing their practice, but others are still considering the evidence.

Horiuchi A et al. Removal of small colorectal polyps in anticoagulated patients: a prospective randomized comparison of cold snare and conventional polypectomy Gastrointestinal Endoscopy 2014;79(3):417-423

Komeda Y et al Removal of diminutive colorectal polyps: A prospective randomized clinical trial between cold snare polypectomy and hot forceps biopsy World J. Gastroenterol 2017;23(2):328-335

TOPIC 5: ***Surgery After Stroke***

A 65 year old man awaiting a total hip replacement had a MCA stroke which was treated with clot retrieval and with subsequent full recovery. He was subsequently found to have a severe left Internal Carotid Artery stenosis. This was angioplastied but no stent was placed, partly due to concern by the neurologists that this (and the requisite antiplatelet therapy) would make subsequent surgery contraindicated. Follow up review at 3 months showed only a 40% stenosis, so therefore it is felt that a stent is not required. He is currently on clopidogrel (monotherapy) and wants surgery for severe hip pain. The neurologist has recommended that surgery proceed, and accepts that the clopidogrel needs to be ceased.

Discussion: - There was general agreement that at more than six-eight weeks post-stroke it was reasonable to proceed with semi-elective surgery. Unless there was major surgical issues, some antiplatelet agent should be continued. In this case, the clopidogrel should be changed to aspirin. It seems that the neurologist appears to be incorrectly presuming that the surgeons have absolute objections to antiplatelet agents in this situation. Surgery may be performed using a spinal with the patient on aspirin. Although there is no clear evidence, the consensus opinion was that it was appropriate to avoid using tranexamic acid.

Topic 6: ***Guidelines for RMO's.***

The existing contribution to the RMO handbook was reviewed and some modifications made. See updated version. (attached)