"From the Trough"

Perioperative Interest Group Notes

Based on Cases discussed at the Weekly PIG Clinical Meeting on 12th April 2018.
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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: Myasthenia gravis – Treatment Options

A young women with a diagnosis (3 months ago) of Myasthenia Gravis with symptoms of fatigability and subtle signs of bulbar involvement (reports she eats slowly, some subjective difficulty swallowing, but no aspiration). Spirometry is normal. "Failed" treatment with pyridostigmine due to muscle spasms/fasciculation. Currently on treatment with prednisone which has caused some improvement, but the patient is bothered by side effects of prednisone therapy. Was referred by neurologists to cardiac surgeons for consideration for thymectomy, and was then booked for surgery within a week. An alternative treatment being considered by the neurologist is intravenous IVIG. Is it worth postponing surgery for a trial of IVIG?

Discussion:- According to general reference texts, "the general consensus is that surgery for thymectomy should be early rather than late in the course of the disease" however in the text this is interpreted as 'within the first 3 years of the disease'. Reference to UpToDate suggests that IVIG can induce a rapid improvement in symptoms of MG (within 2 weeks). It would therefore seem appropriate to consider postponing the surgery to commence IVIG. On the other hand, the patient is only mildly symptomatic, and should handle surgery 'well'. This requires further discussion with both the surgeons and the neurologists to clarify their opinions. The metaphor of the anaesthetist being in the role of the United Nations adjudicating between waring nations was raised.

TOPIC 2: Obstructive Sleep Apnoea

Many patients presenting for surgery screened using STOPBANG have a high likelihood of undiagnosed OSA. What is the appropriate management?

Discussion:- Opinions and recommended practises vary - Some Australian hospitals suggest rapid preoperative assessment after screening with overnight oximetry and early commencement on CPAP therapy. Many (if not most) centres believe that resource limitations make this unfeasible.

Regardless of discussion of 'rapid assessment, it is unrealistic to suggest that all patients at risk of OSA should be fully investigated with sleep studies. World authority on OSA, Francis Chung (Toronto Canada) has a comprehensive website including resources and guidelines for OSA. (www.stopbang.ca). She recommends a reasonably pragmatic approach for most patients other than those with severe clinical OSA (e.g. as evidenced by somnolence etc.) For most patients she suggests going ahead with a "modified" anaesthetic by minimising opiates etc. and observing the patient in recovery.

A recent study (Fernandez-Bustamante 2017) suggests that previously undiagnosed patients with OSA did worse perioperatively than those with diagnosed and treated OSA. This is similar to an earlier study by Abdelsattar 2015. The 'take-home message' is that undiagnosed untreated OSA can be more dangerous than those stable on treatment.

One suggested perioperative management strategy for dealing with patients with possible OSA is to use AIRVO post operatively and sending them to the ward using this. AIRVO is relatively new technology, and practice is changing, but in this hospital, (and many others), AIRVO (or other positive pressure respiratory support techniques) is accepted on the wards for postoperative patients who are already stable on this therapy at

home. It is not accepted as a 'new' postoperative therapy. Thus, patients that are not already on CPAP preoperatively, but needs it postoperatively, should be in a high dependency unit, as they are presumed to be unstable.

REFERENCES:-

Guidelines and resources on postoperative OSA are available on the PeriopTalk website

Fernandez-Bustamante A et al, Preoperatively Screened Obstructive Sleep Apnea Is Associated With Worse Postoperative Outcomes Than Previously Diagnosed Obstructive Sleep Apnea Anesthesia & Analgesia. 125(2):593–602, AUG 2017

Abdelsattar ZM et al The Impact of Untreated Obstructive Sleep Apnea on Cardiopulmonary Complications in General and Vascular Surgery: A Cohort Study. Sleep. 2015 Aug 1;38(8):1205-10.

TOPIC 3: How extensive should surgery be?

A 78 year old man being considered for head and neck surgery (skin cancer left ear) was referred by oncology team prior to MDT discussion for assessment of "fitness for surgery". He has multiple pathologies:-previous cardiac stents, now stable; PPM; MCA stroke 6 months ago with right sided paresis from which he has now made good recovery; Below Knee Amputation 2008; left fem pop bypass 2006; moderate to severe COPD; continuing to smoke despite repeated advice to stop, and not using any respiratory therapy. Past bladder cancer with ileal conduit. Limited mobility due to shortness of breath and left leg pain and weakness. P-POSSUM score suggests approx. 90.5% risk of morbidities 23% mortality. The Oncology team suggests the options are surgery plus radiation or radiation alone, and suggest a 30% chance of remission with radiation alone versus 70% with surgery plus radiation.

Discussion:- The question isn't if he is "fit" but what benefit surgery can offer this patient, given his surgical risk, life expectancy and comorbidities, and the likelihood that there are other skin cancers in the multiple other lesions on his scalp. Surgery for local control may improve quality of life and local disease. The consensus was that surgery should be considered 'palliative' rather than curative, which in this case would be to take the cancer on his ear and the parotid and local nodes but not to do a prolonged, extended, "curative" neck resection. This information needs to be communicated by phone and in a formal letter back to the MDT for their discussions. The case emphasises yet again the need for earlier involvement in assessment of these patients.

Resources

P-POSSUM is a surgical risk prediction scoring system for predicting mortality during surgery.
http://www.riskprediction.org.uk/index-pp.php

Criteria for Screening and Triaging to Appropriate alternative care (CriSTAL) is a screening tool that has been developed and validated in five countries, including Australia, to minimise the uncertainty of prediction of time of death to facilitate the initiation of honest conversations with dying patients and their caregivers about preferences for end-of-life treatment and more appropriate place of death outside acute hospitals.

https://swscs.med.unsw.edu.au/project/validation-cristal-criteria-screening-and-triaging-appropriate-alternative-care

The project is predominantly focussed on minimising inappropriate MET or Rapid Response System calls, but may be a useful resource in this difficult area.