



## “From the Trough”

### Perioperative Interest Group Notes

Based on Cases discussed at the Weekly PIG Clinical Meeting on 30<sup>th</sup> November 2017. Publication date 11<sup>th</sup> December 2017.

Website: [www.perioptalk.org](http://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.*

**Attendance:** Ross Kerridge, Tracey Tay, Len Conrad, Keith Streatfield, Gary Leung, Pat Farrell, Nick Roberts, Françoise Naeyaert

#### **TOPIC 1:** *Cochlear Implant – Putting a value on hearing.*

An 80+ year old female is booked for a cochlear implant, as treatment for profound sensory neural hearing loss due to recent long-term antibiotic therapy for infected abdominal mesh. Background includes: - lifelong obesity, hypertension, diabetes, past medical history of a pulmonary embolism (distant), etc etc. Currently BMI >50; ‘pear shaped’, recently considered inappropriate for surgery to remove infected mesh due to both medical co-morbidities and likely surgical complications. The mesh had been the cause of critical illness due to major sepsis, but the infection is now controlled leaving a chronically discharging fistula. She uses a motorized scooter, and walks with the aid of a walker around the house only, but remains mentally alert and socially engaged.

**Question:** - Although she is unfit for abdominal mesh revision, is she fit for a cochlear implant?

**Discussion:** - Is the surgery appropriate? Benefit vs Risk:- The ENT Surgeons believe she will get an “excellent result” from surgery, with rapid return of useful hearing. (The results from surgical management of the infected mesh are less optimistic.) Infectious Disease consultants believe the risk of infection spreading from the mesh to the cochlear implant is acceptably low. Further assessment is needed to clarify the risk, including for informed consent. Echocardiography suggested to assess for pulmonary hypertension (obesity and previous PE etc). Assess to identify anything else that may be improved quickly (e.g. cardiac status, diabetes, anaemia). Both the risk and cost of this surgery is significant, and life expectancy is limited. So is it worth it? Older discussants (in particular) felt that the adverse effects of deafness in the elderly are commonly underestimated:- By way of example, the relative importance of hearing compared to vision increases towards the end of life – more of life is spent talking and listening, and relatively less moving around the community. The anticipated improvement in hearing, and hence quality of life due to return of hearing is considerable. Hence after discussion, the general consensus was that it is appropriate to go ahead.

#### **TOPIC 2:** *Diabetes Control – How “Tight” should we be?*

A 70+ year old female is awaiting a knee replacement. In anticipation of this, she has increased exercise, lost weight, and generally improved her lifestyle in the months leading up to surgery, and has ‘done well’. Health is generally improved, but at preoperative assessment her HbA1c was (unexpectedly) 8.6%. Discussed with endocrinologists- they were insistent that the case should be postponed to optimise insulin therapy. Some Orthopaedic surgeons now wish to have HbA1c below 7% prior to joint replacement.

**Question:** - Although Is this too ‘harsh’ a target in someone who has worked so hard?

**Discussion:** - Given the engagement of this patient with improving her health, it is a shame to not ‘reward her efforts’ by going ahead with surgery. It was noted that at this time the evidence that short-term preoperative optimisation of HbA1c (at these levels) results in significantly lower infection rates is equivocal. There is no clear ‘inflection point’ where the ‘cut-off’ for surgical risk can be identified. Thus opinions about postponing surgery at this point were mixed. Nevertheless it is generally understood that we need to aim for improved diabetes control. The endocrinologists have become ‘enthusiastic’ in this regard. Hence postponing surgery seems appropriate.

### **TOPIC 3:**            *Perioperative Management of Immunomodulators*

A patient is booked for a laparoscopic cholecystectomy due to 'active' biliary symptoms. Also has a complex vasculitis currently being treated by immunologists with Azothioprine and Plaquenil (Hydroxychloroquine).

**Question:** - Should the case be postponed, or should the immunosuppression be ceased preoperatively?

**Discussion:** - The active biliary symptoms are an indication of risk if the surgery is delayed. Thus although the patient is immunosuppressed with increased risk of perioperative infection, it is appropriate to go ahead on these drugs. For other immunomodulators the management is more complex.

A useful guideline on the perioperative management of antirheumatic medication (including immunomodulators) has recently been produced. This guideline was produced for the context of major joint surgery, and therapy for SLE or other rheumatological conditions. It may be a useful reference for other surgery and other disease management, but it must be noted that the disease for which the immunosuppressive drug is being given must be considered. Involvement of the immunologist or rheumatologist may be needed.  
(see attached and extract).

#### **REF**

Goodman SM , Springer B, Guyatt G et al. 2017 American College of Rheumatology/American Association of Hip and Knee Surgeons Guideline for the Perioperative Management of Antirheumatic Medication in Patients With Rheumatic Diseases Undergoing Elective Total Hip or Total Knee Arthroplasty *Arthritis Care & Research* 2017; 69 (8): 1111–24

### **TOPIC 4:**            *The Old Chestnut:- Timing of Hip fracture surgery*

A large study from Canada has recently been published in JAMA. It is a retrospective cohort study with propensity matching for comorbidities. The study is important because of (1) the propensity matching; (2) the number of patients, and (3) because the patients were studied by comparison of hours between the fracture and surgery rather than by allocation into larger groups (e.g. <24hrs, 24-48 hours; >48 hours etc) comparison between aggregated groups. The average delay between fracture and surgery was 38 hours. The study suggests that there is an incremental increase in complications and death at 30 days if surgery is delayed beyond 24 hours. The editorial also observes that *"patients who underwent early surgery had fewer days of severe pain and fewer major complications. Even with the absence of definitive proof of harm, delaying surgery for no good reason is suboptimal care."*

#### **REFS**

Pincus D, Ravi B, Wasserstein D, et al. Association between wait time and 30-day mortality in adults undergoing hip fracture surgery. *JAMA*. 2017;318(20):1994-2003.

Mark S. Vrahas MS, Sax HC, Timing of Operations and Outcomes for Patients With Hip Fracture—It's Probably Not Worth the Wait *JAMA* 2017; 318(20): 20 1981-2