"From the Trough"
Perioperative Interest Group Notes

Based on Cases discussed at the Weekly PIG Clinical Meeting
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.

Date : 15.6.23

TOPIC 1: **56 F for L3 R hemi-laminectomy, L#/4 micro discectomy**

Large disc bulge at L3/4. Radiculopathy. Nil cauda equina

Background

- BMI 47
- IHD - prev CABG (angio '22 graft to OM occluded, moderate disease otherwise) w/ occaisional angina for medical management due to challenging angiography (patient intolerance)
- T2DM on insulin, poorly controlled
- Graves Dx
- CKD eGFR ~ 45
- CVA – balance and slurred speech remain
- Depression
- Legally blind
- PTSD
- Chronic thrombocytopenia, plt ~100
- Full assistance w/ ADLs, living in group home, consent for self
- Labile BP control – hypotension/hypertension, polypharmacy
- Vapes, ex-smoker, distant asthma

Issues

- **? surgery indicated – main complaint in clinic and with carer was of back pain**
- **? able to physically prehabilitate**
- **Goals of surgery?** – pain v. functional improvement, likelihood of either?
- **Multiple unoptimized comorbidities**
    - ? OHS (HCO3 mildly elevated, previously "slow to wake" after GA in 2021)
    - Poor diabetes control
    - Ongoing vaping
    - BMI 47

Discussion

- Perioperative risk prediction can be challenging in patients like this whereby risk scoring tools may under-estimate risk
- Would benefit from a physician to provide oversite of multiple organ systems and rationalize medications, rather than clinicians acting in silos.
- ? can have a "rehab" direct admission from an outpatient setting
- Shared decision making challenging when patient expectations around surgery outcomes are very concrete

- Our traditional prehab models would not be appropriate due to this patient's existing severe disabilities and needs.

Plan

- Discuss with neurosurgeon - ? surgery indicated, ? risk if surgery postponed/cancelled
- Ideally physician holistic management – will d/w endocrinologist
- Explore rehab or cardiac rehab options
- Investigation and management of ? OHS/severe OSA
- Discuss with GP

TOPIC 2: CDM - Lap +/- open hemicolectomy

70yo lady with ascending colon cancer.

Background

- Mild OSA – nil rx
- T2DM on insulin, Hba1c 8.4
- Guillan Barre / CIDP – pred 6mg / day + IVIG monthly
- Secondary adrenal insufficiency
- Uses 4WW, CFS 3
- Spiro and ECG normal
- Iron replete, not anaemic

Issues

- **For prehabilitation?**

Discussion

- Lap vs open risks NSQIP – long term functional decline high for both ~70%, open much higher risk of serious complications, risk of death ~1% for lap, 3.5% for open
- Risks elevated by falls hx, chronic steroid use, SOBOE
- Would benefit from prehab. Patient motivated to reduce risks where possible as reluctant ++ to incur any loss to independence/function

Plan

- Discuss with prehab coordinator
- Discuss with surgeon - ? appropriate time frame for delay

TOPIC 3: CDM - EVAR +/- cut down to iliacs

62yo male with infrarenal 50mm AAA and bilateral CIA aneurysms

Background

- STOPBANG 5, ESS 6 (patient attributes elevated ESS to recent stress and poor sleep)
- DASI 8 METS
- Quit smoking 8 months ago
- Likely COPD – nil exac/symptoms/LRTI but spirometry in clinic showed FEV1 42%, ratio 0.53

Issues

- **Optimisation required or possible?**

Discussion

- Ideal not to have open procedure if able given likely moderately severe COPD
- If open procedure would need CPET to further quantify risk and targets for optimization (cardiac or respirartory)
- Conversion from endovascular too open on the day of procedure is rare
- Suitable to proceed to EVAR without further optimization/delay

Plan

- Proceed to EVAR

TOPIC 4: Multiple severe comorbidities prior to VATS

73yo male for R VATS and wedge resection for one of multiple lesions, presumed to be metastatic spread from unknown primary

Background

- Partial gastrectomy ’04 for cancer
- Oesophagectomy ’14 for cancer, subsequent strictures requiring dilatations
- Bladder Ca – diathermy based treatment, now under surveillance
- HOCM w/ ASM + LVOTO, TTE 2022 gradient stable 39/15
- IHD – minor L main disease, 70% LAD proximal lesion, + aneurysm, minor LCx, 40% RCA -> medically managed
- Asbestosis – pleural plaques and coarse fibrosis R lung
- Recent GAs well tolerated
- DASI 6 METS

Issues

- **Long QT on clinic ECG –** Nil obvious culprate medications, asymptomatic, 480ms
- **BSL 3.1 in clinic –** nil hx or symptoms
- **Perioperative risk -** RCRI class 3

Discussion

- What is the primary cancer - Multiple previous cancers although reasonably distant. Tissue diagnosis needed for further oncology treatment
- Low BSL in clinic – endocrine suggested morning cortisol and HbA1c
- Overall co-morbidities, while significant, are stable. Reassured by good exercise tolerance and history of daily purposeful exercise.

Plan

- For early morning cortisol, HBa1c, CMP, EUC
- Proceed to OT
- Warning note for HOCM

TOPIC 5: Multiple severe comorbidities, open ilio-inguinal procedure

Elderly patient for iliofemoral endarterectomy for QoL limiting claudication

Background

- COPD – prev on home O2 post CAP, severe emphysema. SpO2 in clinic 89%, reduced to 84% with minor exertion
- PVD – claud 20-50m
- ETOH induced Cirrhosis, Grade 1 varices, bili 20, mildly decreased albumin, Plt 74
- TTE – normal
- Cardiac MIBI -ve

Issues

- **Method of anaesthesia** – procedure usually under SAB + GA due to need for muscle relaxation around surgical space.
- **Optimisation possible?** – severe/critical COPD but recently stable

Discussion

- Acceptable platelet range in this setting? Proceduralist dependent. Advantages to neuraxial technique. Normal coags and negative bleeding history would provide some reassurance.

Plan

- Check coags, FBC
- Flag to procedural anaesthetist
- Discuss with surgeons – how proximal into illiacs would procedure be? (i.e needing relaxation and therefore GA) given his severe COPD

TOPIC 6: Lithium and elective CS

32yo lady G1P0, booked for elective CS. Recent diagnosis of congenital diaphragmatic hernia in the foetus. Highly stressful for mother. Mother on lithium.

Background

- BPAD - On 900mg SR Li

Issues

- **Perioperaive lithium management**
  - Psychiatrist recommended reducing dose to half throughout perioperative period
  - Patient would prefer to maintain current dose
  - Conflicting international and local guidelines about perioperative management

Discussion

- Narrow therapeutic range for lithium
- Unknown (amongst our group) what the implications of perinatal physiology changes may be
- Acknowlegement of maternal wishes in terms of risk of destabilization of mental health due to perinatal stress

Plan

- ECG, EUC, TFTs
- Discuss with neuropsych pharmacist
- *Update:*
  - *Discussed with neuropsych pharmacist and the consultant psychiatric representative for perinatal and infant mental health from community liaison psychiatry*
  - *Post-deliver physiology changes mean a return to pre-pregnancy levels is recommended after birth*
  - *High risk period for toxicity*
  - *Withhold dose the day before surgery*
  - *Lithium levels 8-12hrs post dose (regardless of daily or BD dosing) on day 1*
  - *Avoid dehydration, prioritise sleep*
  - *CL psych review while in hospital. Remain inpatient for 5/7*
  - *Breastfeeding contraindicated*
  - *See attached article from RACGP regarding management of BPAD in the perinatal period (https://www.racgp.org.au/getattachment/743d697c-3fde-4dee-b3c3-330089593633/Management-of-bipolar-disorder-over-the-perinatal.aspx)*
  - *See Lithium during pregnancy and after delivery (narrative review) at https://doi.org/10.1186/s40345-018-0135-7*

TOPIC 8: Cardiac symptoms prior to VATS

RUL presumed malignancy

Background

- PET avid chest wall lesions – skin cancer
- Schizophrenia
- COPD – normal spirometry, chest clear, nil recent exac

Issues

- Palpitations – frequent, long lasting, associated chest pain, diaphoresis, dizziness
- SOBOE 20m
- New chest pain, lasting up to 10 mins, right sided radiating through to back, heavy sensation, at rest
- DASI 3.7 mets

Discussion

- ?APID type tumour – secreting adrenalin / serotonin type substances

Plan

- Stress echo and holter monitor
- Chase TSH and BP + HR records from GP