"From the Trough"

Perioperative Interest Group Notes

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 28/10/21

TOPIC 1: Breast cancer and severe anorexia

49yo female with a large breast cancer requiring mastectomy.

Background

- Anorexia, known to a psychiatrist and a GP with a specific interest in eating disorders
- Excellent exercise tolerance
- Major depression, previous self-harm, and suicidal ideation

Issues

- Anorexia
  - Recent 300kcal/d intake causing 4kg weight loss, BMI down to 16.5, associated with pedal oedema
  - Initial plan for preop admission to CMN under gastroenterology, with nearby psych support, for NG feeding to improve nutritional state.
  - Patient has declined this and has cooperated with increased intake at home (up to 1500kcal/d at present) with associated weight increase and improved exercise tolerance (runs for exercise)
  - Recent pathology normal
  - Patient requesting bilateral mastectomy and reconstruction to occur at same time as feels she will not cope psychologically with mastectomy.
  - Patient has expressed she does not want the surgeon to speak with psychiatrist

Discussion

- **Has this patient's psych history and current status been fully elucidated?**
  - Alarming that she has declined surgeon and psychiatrist multidisciplinary discussions.
  - Is the psychiatrist fully aware of the current issues and plan?
  - Surgeon should attempt to gain approval from patient to speak with psychiatrist. Explain this to the patient in terms of our standard practice for liaison with specialist in any chronic health condition.
  - Provide patient with a framework for the proposed conversation to allay concerns about privacy regarding mental health history.
  - Advanced plan for deterioration is required and psychiatrist should be involved.

- GP to act as intermediary as a second-line plan.

- **Should this patient have a mastectomy or a bilateral mastectomy with immediate reconstruction**
  - Appropriate to proceed to surgery if patient continues current trajectory.
  - Surgeon will consider bilateral mastectomy and reconstruction given significant mental health history
  - Surgeon has advised that mastectomy without recon is preferable from a wound-healing perspective. High risk for wound breakdown, implant loss, and implant infection (especially if non-adherent to nutrition plan postop)
  - Mastectomy can be extremely distressing, even to psychologically well women.
  - Implant loss and wound breakdown are also very distressing.
  - Infection is relatively easily managed with removal of implant (temporarily or permanently) and IV Abx.

- **Perioperative concerns with anorexia**
  - Multiple body systems affected (see review article)
  - Bulimic variant is more physically damaging and may be further complicated by cardio/myotoxicity from emetogenic medications.
  - Risk of cardiac dysrhythmias and fluid overload due to cardiac changes.
  - Other concerns – pressure area/nerve injury risks, active warming of patient and fluids needed, abnormal gastric emptying (assume unfasted), abnormal responses to NDMRs, concurrent drug or ETOH abuse (including amphetamines for weight loss), concerns about plasma levels of certain drugs which have a high unbound fraction if albumin is low.

- **Where should surgery take place**
  - Public hospital with on-site psychiatric support seems most appropriate in event of psychological deterioration postop.
  - Risk of malnutrition and surgical complications will persist for weeks or even months postop.

- **Postoperative disposition**
  - If baseline ECG normal, nil evidence of dysrhythmias intraoperatively, and normal electrolytes, normal ward-based care is appropriate afterwards.
  - A plan should be in place for daily electrolyte monitoring and telemetry should derangement occur.

Plan

- Reasonable to proceed with reconstruction from a purely physiologic perspective, given current nutrition status.
- Surgeon to attempt to gain consent from patient to speak with psychiatrist.
- Consider involving psychiatry liaison service while patient admitted, for mental health wellbeing monitoring.
- If not already done – check CMP/B12/folate/TFTs
- NSW Health provides guidance for patients who are admitted to hospital with a decompensation of their eating disorder:

https://www.health.nsw.gov.au/mentalhealth/resources/Publications/inpatient-adult-eating-disorders.pdf

TOPIC 2: Update - Laparoscopic partial gastrectomy

77-year-old man with gastric cancer. Previously discussed at PIG as a consult.

Background

- COPD- severe obstructive disease. FEV1 - 0.95, FVC - 3.36
- AF - DOAC

Issues

- Presented with UGI bleed - Hb 48. No opportunity for NAC or optimisation
- Referred to respiratory physician for investigation of lung masses. Thought to be non-cancerous.
- Living at home with exertional dyspnoea
- Patient and family keen to proceed with curative surgery

Post-operative progress

- Admitted for procedure - lap assisted distal gastrectomy
- ICU post-operative for 24 hours
- Discharged to ward

72 hours post-op:

- Acute dyspnoea, APO, and AKI. Readmitted to ICU
- Treated for HAP; High-flow oxygen, fluid overloaded.
- Creatinine increasing, anuria, and delirium
- CT showed no surgical complications, echo - nil significant
- Difficult situation - no way forward.
- Evidence - When to start dialysis? Outcomes unchanged when started earlier vs later. Surgical patients do better but likely better baseline than medical patients.
- MDT meeting - dialysis commenced over 5 days. Stabilised and went to ward. Declined again and now palliative.

Discussion:

- Preoperatively predicted that this would be a likely outcome if had any postoperative complications involving major organs
- Family well-informed preoperatively

TOPIC 3 - Hypothyroidism and PPM

66-year-old lady for TKR - initial preop 2019

Background:

- IHD - Normal stress echo 2020. No angina.
- AF
- MVP

- Asthma

Issues

- Bradycardia - 45bpm. Fatigued, no syncope.
- Discussed at cardiology meeting.
    - Referred to own cardiologist
    - Recommended PPM
- Bilateral pitting peripheral oedema. Complaining of orthopnoea and PND.
- DASI - 3.97, limited by fatigue
- Echo 2020.
    - dilated cardiomyopathy
    - severely dilated LV and LA
    - MR with prolapse
    - Severe AS
- Returned to clinic this week for PPM insertion
- Thyroid function checked:
    - TSH = 8 hypothyroidism.
    - on thyroxine but not checked regularly
- Echo repeated due to oedema, orthopnoea, and PND:
    - Normal Aortic Valve. No stenosis!

Discussion:

Does patient need PPM?

- Likely that symptoms be attributed to hypothyroidism
- Imperative that hypothyroidism is addressed first

Hypothyroidism

- Medication compliance issue should be considered
- Timescale for expected changes with treatment of hypothyroidism.
    - weeks for improvement of symptoms
    - 3 months for biochemical changes
- Important to look at clinical picture as well as biochemistry when making decisions regarding fitness for surgery
- Current clinic guidelines for TFT's:
    - 'Monitoring is usually performed serially by GP. Consider testing peri-operatively if not done within 12 months if stable disease or sooner if frequent medication changes required/new cardiac arrhythmias/or signs and symptoms of thyroid disease.' www.perioptalk.org
- If request TFT's will only get TSH value and need to request T3/T4 separately if required or if TSH abnormal

Aortic Stenosis?

- Need to revisit cardiac imaging - possibility of error with previous echo regarding documented AS
- Discuss at Cardiology MDT - ideal place to consolidate this information and facilitate liaison with regular cardiologist

Plan

- Postpone for 6 weeks
- Cardiology MDT
- Review perioperative guidelines for Thyroid Function testing

TOPIC 4: Minor Gynae surgery On DAPT and Anticoagulation

43yo lady for EUA, D&C, and Mirena.

Background

- **Abnormal uterine bleeding** – over last 4 years. Menorrhagia and irregular bleeding. Hb 142. Fe studies borderline. Normal endometrial Pipelle biopsy.
- **Radical vulvectomy** 2020 – malignant undifferentiated neuroendocrine tumour. Margins included. For radiotherapy as per last Gynae-oncology MDT.
- **Asthma/COPD** - Current smoker
- **Complex PTSD and chronic pain syndrome** – known to Dr Chris Hayes
- **Increased BMI**
- **Immobility** - walks with 4WW or uses wheelchair due to above issues.

Issues

- **IHD** – multiple myocardial infarctions, last in 2018. DAPT. No regular cardiology follow-up.
- **LV thrombus** 2018 – anticoagulated with warfarin.
- **IDDM** – previously very poor glycaemic control. Recent HbA1c 7.1%. regular endocrine review.
- **PVD** – multiple lower limb surgeries. Prolonged admission in 2020 with femoral endarterectomy/fem-pop bypass, fasciotomies, and multiple angiographic procedures.
- Gynae were unaware of DAPT and Warfarin

Discussion

Correct procedure for this patient?

- AUB and urinary incontinence are main issues for patient.
- Doesn't want a Mirena as has had one previously; menorrhagia was worse and Mirena expelled itself.
- Patient thought she was having an endometrial ablation
- Discussed above issues with surgical team. They organised to review her again in clinic and revisit her surgical options.

Management of anticoagulation and DAPT

- Haematology review during last admission documented 'unidentified prothrombotic state.'
- No outpatient Haematology review arranged on discharge, no pathology on system.
- A firm plan should be in place for management of anticoagulation and antiplatelet therapy perioperatively.
- Discuss with the cardiologist next week at MDT
- Is her triple therapy appropriate anyway? Could she just be on a NOAC?

Plan:

- Postpone surgery for 4 weeks
- Discuss at cardiology MDT

- Re-review with gynae team organised
- Referred to haematologist for investigation and advise on anticoagulation/DAPT

TOPIC 5: Update - Parkinson's and laminectomy

75-year-old lady for L4 and L5 laminectomy for bilateral leg pain.
Retired anaesthetist

Issues:

- Parkinson's - non-tremor dominant. Decreased mobility with rigidity, constipation, depression, and urinary incontinence. On Apomorphine infusion.
- Bulbar symptoms? Quiet voice and slurred speech on telephone. Denies dysphagia but describes frequent choking episodes, particularly at night.
- Recent aspiration pneumonia:
    - Awoke from sleep in middle of the night 'choking'
    - 1-week hospital stay, requiring IV antibiotics.
    - Treated for fluid overload.
- TKR - 09/21. Uneventful spinal. Had been discharged a week when developed aspiration pneumonia.
- Frailty - significant decline in functional capacity over recent months. Requires care with all ADL's, housebound. CFS = 7
- C1/C2 arthropathy - severe neck pain, referred for regional block. Pending.
- Distance patient
- Difficult to perform adequate clinical assessment via phone consult.

Update

- Discussed with neurologist:
    - Disease severity and contribution of Parkinson's to current immobility
    - Recent major surgery and readmission to hospital - choking episode related to Parkinson's/opioids/both?
    - Suggestion of possible early cognitive decline?
    - Neurologist feels that pain is a significant issue but is certain that she has significantly deteriorated from a Parkinson's perspective.
    - No documented any bulbar symptoms or cognitive decline but feels that these would be realistic symptoms of this type of Parkinson's
    - He has organised a preoperative review
- Discussed with neurosurgeon:
    - Laminectomy will only help with back pain/sciatica in this case.
    - He anticipates no improvement in mobility or urinary incontinence.
    - Happy to review in clinic and revisit indications and expected surgical outcomes

- Video consult
    - Very helpful
    - Patient did not appear as frail as she sounded
    - Updated patient and husband on neurosurgical and neurologist conversations
    - Husband expressing frustration at current level of immobility and encouraging patient to proceed with surgery when she was concerned regarding risks

Discussion

Timing of procedure

- 8 weeks post TKR - concerning regarding risk for DVT post TKR
- Previous PE
- Discussed with neurosurgical team - they are not concerned. Predicting a non-instrumented, quick procedure with Clexane recommenced within 24 hours.
- Patients current level of immobility emphasised.

OSA?

- Describes regular 'choking episodes' at night
- BMI 33, no previous investigations for OSA.
- STOPBANG - 5 ESS 7, HCO3 normal

Plan:

- Await input from neurologist regarding Parkinson's progression.