"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 2/9 /21

Attendance: Mich Poppinghaus, Emma Hewitt, Victoria Fraser, Blair Munford, Bec Potter, Ross Kerridge, Phil Beames, Lisa Doyle, Ashok Dharmalingham, Steve Bruce, Libby Freihaut, Tom Martin, Lachlan Frawley, Daniel Zardawi, 60095362, Steve Pickering, Greg Dale

TOPIC 1: EVAR and new Diagnosis of COPD

84-year-old man with 5.9cm infra-renal AAA

Background

- Incidental finding on CT for urology
- BPH – recent cystoscopy under GA with no issues

Issues

- Undiagnosed COPD? Never seen respiratory physician, distant smoking history.
- SpO2 = 84% on room air, decreased to 87% following walk up 2 FOS
- Clinic spirometry: severe obstruction, FEV1/FVC = 0.59/1.78= 0.33
- HARD card - previous difficult intubation, and history of suxamethonium apnoea
- Hypertension = 183/92 in clinic

Discussion

Optimisation

- Referred to Rapid access respiratory clinic, appointment 4 weeks after planned surgery date
- Consensus that we should await respiratory review if surgeon happy with delay
- Needs formal spirometry - assessment of severity and bronchodilator reversibility
- Potential to improve pre-operatively with COPD therapy
- Download GOLD app at www.goldcopd.org for assessment and treatment algorithms

Conduct of anaesthesia

- GA -history of difficult airway and significant anxiety
- Most thought it would be prudent to secure the airway at the beginning of the case
- Discussed with surgeon, anticipates 2-hour surgical time

Plan

- Await respiratory review and formal spirometry

TOPIC 2: Ethmoid sinus biopsy

84-year-old man with B cell lymphoma and new sinus masses

Background

- Diffuse large B cell lymphoma, secondary to mycophenolate
- R-CHOP chemotherapy
- New onset headaches and diplopia - PET-avid sinus lesions

Issues

- Profoundly frail and deconditioned. CFS = 6, DASI 2.9 METS
- Multiple hospital admissions this year including ICU stay for neutropenic sepsis and 40-day hospital admission
- Renal Transplant 2014 - live donor kidney from wife. Native polycystic kidney disease.
- IDDM - secondary to methylprednisolone for acute transplant rejection
- Severe MR - Mitraclip in Nov 2020 post chordae rupture.
- Regular cardiology follow-up until lymphoma diagnosis, current plan to focus on cancer treatment.
- Recent echo - mild to moderate residual MR, Moderate concentric LVH, low-normal systolic function, moderate to severe pulmonary hypertension, and severe LA enlargement.
- Paroxysmal AF - not currently anticoagulated
- VRE

Discussion

Reason for procedure

- Diagnostic vs therapeutic - patient and family believe it may help to resolve his headaches
- Discussed with ENT - diagnostic procedure only. Requested by oncologist. The Surgeon does not think it will add any therapeutic benefit.
- Surgeon and oncologist to have further discussions

Opportunity for optimisation

- Discussed with Prof Fletcher, last echo reassuring. Patient on optimal cardiac therapy.
- Significant level of frailty and deconditioning are concerning
- High-risk patient and low risk procedure
- Ascertain if biopsy will significantly affect the management of his malignancy

Advanced care planning

- No documented advanced care directive in notes

Plan

- Await outcome of discussions between oncologist and ENT surgeon
- Liaise with patient regarding ACD

TOPIC 3: EUS Pancreas – Repeat referral

56-year-old lady with recurrent pancreatitis

Background

- 'Grumbling' chronic pancreatitis over last 3 years
- Monthly symptoms and hospital presentations
- Lipase and LFT's elevated
- Previous cholecystectomy

Issues

- Severe COPD and asthma- 26 pack year smoking history
- Severe mixed obstructive and restrictive defect on formal spirometry: FEV1/FVC = 0.71/1.66, Bronchodilator reversibility. TLCO 69%
- Multiple admissions with infective exacerbations of COPD
- Mild OSA
- NYHA Class 3 dyspnoea, walks 200-300m on flat
- Attended JHH for EUS pancreas a few weeks ago, waking from RNC to JHH door to gain entry to hospital and was dyspnoeic. A passing Dr noticed her respiratory distress and stopped to help her, called the gastroenterologist and the procedure was cancelled.

Discussion

Opportunities for optimisation

- Discussed with regular respiratory physician, optimised from respiratory perspective, but suggests there may be room to improve dyspnoea with diuretics.
- Recent admission with infective exacerbation of COPD, she responded to a small dose of furosemide.
- BNP during admission = 982.
- Post-discharge, Sestamibi and TTE were normal.
- Awaiting appointment with cardiologist

Proceed to surgery?

- Patient at her baseline best, states that the dyspnoea she was experiencing was normal for her.
- Cardiology opinion useful in the long-term
- Cardiac investigations reassuring
- No benefit to repeating BNP, unlikely to change anaesthetic management
- Needs to be assessed for fluid status on DOS

Plan

- Proceed to surgery
- Discuss at cardiology MDT

TOPIC 4: CONSULT - Severe bullous emphysema for inguinal hernia repair

41-year-old man for consideration of Open Right inguinal Hernia repair

Background

- Symptomatic right inguinal hernia, contributing to chronic pain
- Intermittent obstructive urinary symptoms

Issues

- Severe bullous emphysema - currently being worked-up for double lung transplant

- Ceased smoking 2 years, 25 pack year history
- Previous heavy marijuana use - now ceased
- Pulmonary rehabilitation ongoing, very motivated
- DASI 6.2MET's
- No hospital admissions with LRTI, no history bullae rupture
- Formal spirometry: FEV1=2.19 (58%), FVC=3.77 (82%), TLCO=39%
- Normal sleep study and Echo
- 6MWT = 518m - 81% of normal distance for age
- Chronic pancreatitis, no alcohol use
- Chronic pain and significant anxiety/depression issues.

Discussion

Timing of surgery

- Consensus that is appropriate to perform hernia surgery prior to transplant
- Patient is experiencing discomfort from hernia and transplant surgery may be years away

Optimisation

- Fully optimised from respiratory perspective, and had all relevant respiratory and cardiac investigations
- Chronic pain is a concern, especially with a view to transplant surgery

Anaesthetic Techniques

- Patient is very keen for regional anaesthesia
- Spinal vs Local infiltration discussed, consensus opinion that either would be a suitable anaesthetic

Plan:

- Proceed to surgery
- Discuss meeting outcomes with surgeon
- Refer to HIPS for chronic pain management

TOPIC 5: Laparotomy with previous CVA

47-year-old lady for laparotomy, left hemicolectomy and ileocolic resection

Background

- Crohn's disease - current descending colon and terminal ileum strictures
- Multiple previous surgeries 20 years ago
- Recurrent perianal abscesses
- Poorly controlled disease, on 10mg prednisolone and infliximab

Issues

- Cryptogenic occipital CVA in 2019
- No risk factors
- Cardiology and neurology review at time of event
- TTE, and bubble study performed - Reported as normal aside from 'a probable pseudo-mass in LA which could represent a side lobe artefact.'

- Holter showed Ventricular bigeminy - asymptomatic
- No further issues with CVA's

Discussion

Further investigations warranted?

- Is there an indication to repeat echo/bubble study?
- Consensus was no, reported as artifact and a repeat test is unlikely to change management.
- Suggested that we could discuss this with the cardiologist who reviewed at time

Plan:

- Discussed with cardiologist, scans reviewed and happy that LA mass is artefact.
- Ventricular bigeminy ongoing, cardiologist feels benign in setting of normal LV systolic function and lack of symptoms

TOPIC 6: Oophorectomy and Partially Empty Sella

31-year-old lady for Hysteroscopy, D&C, Ablation, and Laparoscopic Bilateral Oophorectomy

Background

- Chronic pelvic pain, recurrent ovarian cysts
- Menorrhagia and anaemia, known to Gynaecologist for many years
- Multiple previous hysteroscopies and laparoscopies
- Decision to have oophorectomy made the day prior to clinic review via preoperative phone consult with proceduralist
- Recent referral to chronic pain specialist, review pending

Issues

- Partially Empty Sella syndrome - ACTH, TSH, and Prolactin deficiency
- On high-dose Hydrocortisone
- Previous Addisonian crisis perioperatively despite steroid replacement regime?
- Hypothyroidism
- Severe untreated GORD
- Procedure booked for private hospital with no onsite endocrinology support
- Very fit and healthy lady despite co-morbidities. DASI >10

Discussion

What is Partially Empty Sella?

- Empty sella – Radiological description. Pituitary gland shrinks/is compressed by CSF making the sella look empty.
- Partial empty sella - remnants of the pituitary gland visible on MRI
- Rare condition, congenital. Mainly affects women
- Hypopituitarism – mainly deficiencies of anterior pituitary hormones.
- Common manifestations are Central hypogonadism and female infertility.

Perioperative management of Addison's

- Maintain hydration and regular steroid replacement
- Monitor electrolytes and BSL

- IV hydrocortisone replacement at start of surgery - dose dependent on surgery and duration of fasting
- IV hydrocortisone replacement in first 24 hours after intermediate and major surgery
- **Endocrinologist advice recommended.** See attached BJA education paper

Suitable for Private Hospital?

- Consensus was no, surgery should be rescheduled to occur at JHH
- Endocrinologist in agreement, should be in hospital where they are available to consult

Plan:

- Proceed at JHH
- Steroid replacement regime in conjunction with endocrine
- Recheck pathology including TFT's
- Commence PPI
- See article Anaesthesia and Pituitary Disease doi:10.1093/bjaceaccp/mkr014

TOPIC 7: DOS cancellation for Hyperglycaemia

45-year-old man planned for cystoscopy and retrograde pyelogram

Background

- IDDM - Type 1
- ESRF - haemodialysis
- Uncontrolled hypertension
- Cognitive decline - multiple CVA's
- BKA 2018

Issues

- Cancelled on day of surgery - BSL = 27mmol/L
- Regular insulin and antihypertensives had been withheld on morning of surgery

Discussion

Could this have been prevented?

- Phone consult undertaken - difficult due to cognitive decline
- Webster pack reviewed and medications charted accurately
- Insulin not documented on webster pack form and missed
- Phone call from day stay to patient the night before. Patient asked about insulin, told to withhold as nothing documented in notes
- Very easy mistake to make during difficult phone consult
- Need to check separately for injectable medications, inhalers, anticoagulants, and aspirin
- Prolia (denosumab) commonly forgotten by patients as is 6-monthly injection. Important to withhold around time of major joint surgery
- Perioperative management of medication guidelines www.perioptalk.org
- If in doubt about perioperative medication, can discuss with prescriber