"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

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