"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 : July 20th

TOPIC 1:

Background

- 80/M for right nephrectomy, incidental finding on USS for nocturia
- Severe COPD. Smoked since age 11, 100/day, quit 1 month ago.
- Spirometry in clinic: FEV1 36% pred, SpO2 96% on RA
- Staging CT showed bullous emphysema
- Functionally manages well, describes reasonable exercise tolerance, denies dyspnoea with daily activities. Walks around the block daily.
- Mini-cog 2/5

Issues

- **Elevated perioperative risk:**
    - Severe respiratory disease placing him at high risk for post-operative pulmonary complications
    - Risk for post-operative delirium/POCD
- **Opportunity for optimisation?**

Discussion

- CPET would be useful as an objective way of quantifying exercise tolerance over patient's subjective report. This would aid quantification of perioperative risk.
- Prehabilitation would also be useful and CPET would assist planning a program for this.

Plan

- CPET testing followed by prehabilitation program

TOPIC 2:

Background

- Patient for biopsy of left lower eyelid, left canthus and nose, right cheek lesion
- Multiple cardiorespiratory comorbidities. Morbid obesity (BMI 59).
- Previous HARD card from 1991 noted with grade 3-4 view, however GA in 2019 with documented grade 2 view with bougie for intubation.
- Significant anxiety - requesting sedation or GA.

Issues

- **Mode of anaesthesia:** sedation or GA

Discussion

- Sedation problematic due to obesity and potential airway compromise with sedation. Compounded by issues with HFNP oxygen (or any supplemental oxygen) being applied given location of lesions, as well as limited access to airway if support is required. Additional problem with O2 and diathermy.

Plan

- General consensus for GA with ETT

TOPIC 3:

Background

- 81F for colonoscopy for altered bowel habit. Not anaemic.
- Severe COPD, stable hypothyroidism, breast ca,

Issues

- **Appropriateness of proceeding:**
    - Severe COPD, breathless with pursed lip breathing after walking along hallway to clinic room.
    - Known to Prof. Gibson, last correspondence suggests she is optimized.
    - Audible wheeze, sats 94% on RA.
    - Unable to shower self or make bed, DASI METS 3.97

Discussion

- Most patients can tolerate a colonoscopy
- If there was a complication (eg. aspiration) this would likely be terminal for this patient.
- Correspondence from the gastroenterologist suggested he thought it very unlikely he would find anything. If cancer was found, the patient is unlikely to be fit for surgery.
- Discussion with gastroenterologist who agreed patient was extremely high risk and had been looking for consensus not to proceed. Mentioned that he had considered CT colonography as an alternative. This also requires prep but can be done without sedation and is much faster. Drawbacks are that it is diagnostic only, and may require subsequent colonoscopy.
- Discussion about limited anaesthetic time available for endoscopy, and increasingly more patients requiring anaesthetic support. Should we be more judicious in considering the use of this resource when CT colonography is a reasonable alternative in some?

Plan

- Patient referred back to gastroenterologist for a CT colonography.

TOPIC 4:

Background

- 79M for colonoscopy - previous positive FOBT, subsequent negative FOBT. Asymptomatic. Not anaemic.
- Acquired brain injury, limited understanding, difficult historian
- OSA
- Mod-severe COPD
- AF - on apixaban
- Heart failure (NYHA3) - recent admission for exacerbation requiring diuresis and fluid restriction
- Most recent echo - moderate diastolic dysfunction, moderate pulmonary hypertension
- Very limited exercise tolerance, limited due to SOB - difficult to quantify precisely due to quality of history.
- Lives alone but has carer 3 times weekly

Issues

- **Appropriateness of proceeding:** Similar to previous case, high risk/complex patient in terms of heart failure and cognitive limitations - should we proceed with colonoscopy?

Discussion

- What is the likelihood of intervention if cancer was found? More likely to be offered surgery than previous patient. And may prevent presentation with more advanced pathology down the track which would make intervention worthwhile. Discussion around life expectancy of patient and the fact that clinician prediction of life expectancy is very poor and limited models exist for prediction of life expectancy.
- What is the appropriateness of FOBT in this population? Pre test probability for this patient is low.
- Discussion regarding low value healthcare involving low yield or futile therapies with minimal change to QOL in last years of life.

Plan

- For CT colonography in the first instance.
- Would be reasonable to proceed with colonoscopy if indicated.
- Would likely need supervision for bowel prep given cognitive impairment and heart failure.

CT Colonography

CT colonography provides a computer-simulated endoluminal perspective of the air-filled distended colon. The technique uses conventional spiral or helical CT scan images acquired as an uninterrupted volume of data and employs sophisticated post-processing software to generate images that allow the operator to evaluate a cleansed colon in any chosen direction.

CT colonography is an option for colorectal cancer (CRC) screening in asymptomatic average-risk individuals over the age of 50 years. Other indications for CT colonography include the evaluation of the proximal colon in patients with an obstructing CRC or evaluation of signs or symptoms of CRC in whom a colonoscopy cannot be performed due to intolerance, technical difficulty, or in whom a colonoscopy is contraindicated. (See 'Indications' above.)

Relative contraindications to CT colonography include the following:

•Active colonic inflammation (eg, acute diarrhea, active inflammatory bowel disease)

•Symptomatic colon-containing abdominal wall hernia

•Recent acute diverticulitis

•Recent colorectal surgery

•Recent deep endoscopic biopsy/polypectomy/mucosectomy

•Known or suspected colonic perforation

•Symptomatic or high-grade small bowel obstruction

Patient preparation consists of dietary restriction with a low-residue diet and clear liquids for 24 hours or more and **bowel preparation** with a laxative.

The available data suggest that CT colonography provides a similarly sensitive, less invasive alternative to colonoscopy in patients presenting with symptoms suggestive of CRC. CT colonography may be particularly valuable in patients with an obstructing CRC with the ability to tolerate a bowel preparation. In one study, performing a CT colonography led to a change in the surgical plan because of the presence of synchronous tumors in 1.4 percent of cases [59]. However, given that colonoscopy permits removal/biopsy of the lesion and any synchronous cancers or polyps that are seen during the same procedure, in our view, colonoscopy remains the gold standard for investigation of symptoms suggestive of CRC. CT colonography is preferred over barium enema where access to colonoscopy is limited.

(ref. UpToDate)