

"From the Trough"

Perioperative Interest Group Notes

Based on Cases discussed at the Weekly PIG Clinical Meeting on 31st May 2018. Publication date 12th June 2018. 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.

TOPIC 1: Triage criteria for a satellite hospital (Belmont)

Direct access colonoscopies are nurse led for booking and triage. Largely uneventful but some unease amongst proceduralist and anaesthetist on occasion. No specific issues reported to me. Some patients going through preop though. Email the consultant group for feedback of any issues.

Development of a guideline for obese patients being treated in a day surgical centre are just getting started.

TOPIC 2: Should we proceed?

A 50 year old alcoholic, smoker ex IVDU patient is booked for vocal cord biopsy for dysplasia. He presents on day of procedure and reports that his clear fluid at 6am was a schooner of beer. Question:- Do we go ahead?

Discussion:- <u>Yes:-</u> 1. He will never change:-alcohol is part of his 'homeostasis'. 2. The beer is providing a carbohydrate load, (more or less in accord with ERAS principles!) 3. Traditional concern about carbonated drinks before anaesthesia has never been based on high-level evidence. 4. Although he has not followed instructions, there was is no evidence-based reason to believe he is at increased risk anyway. <u>No:-</u> The integrity of preoperative instruction system must be maintained by cancelling anyone who admits to not following them. (The consensus was to proceed.) Further question:- What if the drink was only 2 hours ago? **Discussion:**- There was more ambivalence and variety of opinions on this point. Some felt it reasonable to go ahead anyway: but note that a schooner of beer is 425mls and therefore slightly in excess of the generally accepted "200mls an hour" accepted limit for fluid intake. A 'simple' solution is to create some delay by reshuffling the list. As a 'preventitive' measure, some centres (e.g. the Cleveland Clinic) report using early identification of patients considered at high likelihood of being a 'no-show', or not following instructions, such as this gentleman, and systematically scheduling them later on the list, where a late cancellation is less disruptive to theatre efficiency.

TOPIC 3: Patients on Gliflozins.

A patient is transferred from elsewhere for repair of a complex hand laceration with tendon and nerve injuries. There is not 'acute' surgical urgency. The patient had been fasting 36 hours (during transfer to tertiary centre). The patient is a diabetic on gliflozin therapy, and was given the normal dose this morning (even though fasting). On arrival in operating theatre suite the patient felt well, and BSL was in normal range, but ketones were 3.2. Venous blood gas showed bicarbonate of 17 (ie acidosis). After discussion with intensive care the case was postponed to treat the developing diabetic ketoacidosis. Surgeons accepted this. Question:- Should the case have been cancelled?

Discussion:- The general consensus was that it would have been appropriate to go ahead, simultaneously with treatment of the euglycaemic ketoacidosis. (Which is based on insulin infusion for the euKA, with added intravenous glucose to prevent hypoglycaemia). A regional block would be ideal for this case but general also not contraindicated once the ketoacidosis was under treatment. Arguably treatment under the 1 to 1 supervision of an anaesthetist was as safe (if not safer) than more diffuse supervision in intensive care. The patient was not unstable and would be expected to recover quickly once treatment for the ketoacidosis (insulin/glucose infusion) was commenced.

Note there is ongoing controversy about the perioperative management of gliflozins. There have been some cases of ketoacidosis occurring even when the patient had ceased treatment for more than 72 hours. As a result, some endocrinologists are suggesting they should be ceased for 1 week prior to surgery. Conversely, others are suggesting that this is excessive and the previous recommendation of 24 hours (day of surgery) is sufficient. There is also some lack of clarity about the exact causative mechanism of the ketoacidosis. The next edition of *Anaesthesia & Intensive Care* will carry further discussion of this issue.

TOPIC 4: Surgery in the lazy???

A 73 year old female with a caecal cancer for right hemicolectomy has very limited exercise tolerance. Referred by surgeon for early opinion re preoperative evaluation, and suitability for surgery in a smaller (private) hospital setting. PMH:- Has had a tissue aortic valve replacement in six years previously, and the cardiological follow up has been good. The most recent echo shows good valve and myocardial function. No signs or symptoms of ischaemic heart disease. Obese, T2DM on metformin only. BMI 42. Uses CPAP nightly. Minimal exercise. Question:- What further investigations are indicated given the lack of exercise induced cardiac symptoms?

Discussion:- Given the good follow up so far, and previous "good" results, no value in further or invasive cardiological investigations. The exercise limitation is presumed due to lack of exercise. (This opinion supported by cardiology.) There is some weak evidence that there is benefit (within weeks) of short term preoperative exercise to raise anaerobic threshold although at this stage the evidence that this affects perioperative outcomes is equivocal. Suggested that the patient should be given 'strong and stern' advice to take up exercise preoperatively. Ideally, a tailored exercise program should be developed with the patient (e.g. two 30 min 'vigorous' exercise sessions daily). This program should be given as a 'prescription' to the patient. Some advocated suggest using a prescription pad to document the program, to reinforce to the patient that this is 'exercise as medicine'. Question:- Should the patient be done in a large tertiary centre or in a smaller private hospital? Pragmatically, the patient would be suitable for either:- A 'simple' right hemicolectomy is not the biggest of operations ("not much more than an appendicectomy"). The major perioperative challenge will be early mobilisation postoperatively to prevent respiratory and other complications. Given the patient was referred as a consultation, there needs to be a formal letter documenting the opinion so that wherever the patient has surgery these thoughts are available to the treating clinicians.

TOPIC 5: Cystic Fibrosis and Vascular Access

A 57 year old man with cystic fibrosis presenting for a hemicolectomy. Patient is in remarkably good health despite his disease. He has improved dramatically in the last 2 years on new therapy (Orkambi) as part of an experimental protocol. The patient has had problems with venous access in the past including superior vena cava obstruction with subsequent cardiothoracic surgery to construct a jugular to right atrial graft. This may well be the major concern perioperatively. Vascular consult and studies including Venous doppler and CT venogram to clarify vascular anatomy for access purposes. The patient is being brought into hospital three days early for respiratory therapy ("tune up") i.e. regular nebuliser with Pep, physiotherapy, infection review and possible antibiotic therapy.