"From the Trough"

Perioperative Interest Group Notes

Based on Cases discussed at the Weekly PIG Clinical Meeting on 6th April 2017.
Publication date DAY MONTH 2017.
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: ***High Risk Cervical Spine Surgery +/- Respiratory failure***

A 62 year old woman is awaiting a C2/3 Cervical Spine Fusion for severe instability due to rheumatoid disease. The neurosurgeon reports that "her head is only just attached to her body"! A slight fall could be enough to cause catastrophic neurological injury. She also has severe lung disease (FEV1 .08 FVC2.0 L. DLCO 25%). Lung disease has been stable since 2015 when she was initially booked (and postponed for surgery, among other things to stop smoking). She has a very significant fear of a neck injury and as a result travels reluctantly, but still lives alone and does "gentle things". The surgeon agrees that her fear of injury is reasonable. She stopped smoking (finally!) 5 weeks ago. Her respiratory function now is as good as it can be. She doesn't wish to risk travelling to Newcastle till surgery. How to manage?

Discussion: - There is a real risk of postoperative respiratory failure. There needs to be clear discussion of risks. Her life is "bearable" at the moment. She was offered a discussion by phone, and anaesthetist established good rapport. She understood there was real risk but wanted better understanding of this (i.e. numbers). She was enthusiastic about having advice using numbers derived from a variety of risk calculators to help her discussion making. The risk numbers could be from global risk calculators or from specific disease risk calculators.

There is good evidence from behavioural sciences that risks should be discussed in terms of natural frequencies (e.g. risk in 100 patients) rather than the conventional risk descriptors used in medical literature. For risks of rare events (bigger numbers) it should be in a context that is meaningful to the patient (e.g. "if everyone in a Knights game crowd was treated, X would have this complication").

Apart from discussion of respiratory failure, there needs to be a very clear plan of management regarding limitation of care, and management of such, if there is catastrophic neurological injury to spinal cord during the anaesthetic and surgery. There needs to be clear communication with the procedural anaesthetist beforehand. Obviously needs very careful positioning at the time of anaesthetic. It was not clear and there is no 'evidence' as to whether she should be advised to wear a supportive collar (soft or hard) when travelling to the hospital – but many felt they would in her situation….

TOPIC 2: **Continuing, controlled, heroin use.**

A 55 year old gentleman who is reasonably fit is booked for a total knee replacement. He is a chronic stable methadone user due to his past "colourful & chaotic" life. He still uses heroin at home, as a planned event, about once per month in a very controlled fashion. The rest of his life is now remarkably 'ordinary'. He has a full time job including driving and with work responsibilities. He has stopped tobacco smoking, and most other aspects of his life not "high risk". His heroin is obtained 'clean' and he is scrupulous about using clean needles. There were widely differing opinions amongst perioperative clinic nursing and medical staff about whether it was appropriate to go ahead with this surgery. The surgeons were concerned about the infection risk (i.e. to the prosthesis) associated with injecting behaviour.

Discussion:- The patient recognises that his behaviour is unconventional, but is open and honest about it. He can modify his behaviour around the time of surgery. Objectively, given the degree of control in his life, the

increased infection risk and other hazards due to self-injection would be considerably less than the increased risk associated with other high risk behaviours (e.g. smoking, poorly controlled diabetes, obesity etc that we commonly accept.). Hence this is not necessarily a reason to not go ahead with surgery. Postoperative analgesia will need to be carefully planned as for any chronic opiate/methadone user. There was general consensus that it was appropriate to go ahead.

TOPIC 3: ***Non-Compliant Type1 Diabetic***

A 19 year old male with type 1 diabetes is very poorly compliant (BSL 19) and has a fractured nose after injury, for close reduction. He has no complications of diabetes (yet). How should this be managed? Although it is a short procedure, the patient is noncompliant, minimises his problems and is uncooperative, it was felt that he should be admitted overnight for acute stabilisation of his diabetes, involving the diabetes service, prior to the procedure. The diabetologists agreed with this plan. Although the evidence for this is perhaps not as strong as it could be, to do otherwise would reinforce the perception that management of his diabetes was not important. This episode may offer a "point in time" to intervene and reinforce the importance of good control of diabetes.

Follow up:- A patient was recently discussed at a PIG Meeting for a metatarsal fusion ("a minor operation") with poorly controlled diabetes (and a strong element of denial). After some contention the surgery had gone ahead. Unfortunately the operation became infected, the patient required readmission, debridement, VAC dressings etc. This lead on to sepsis which became further complicated and the patient died in ICU some 3 weeks post operatively.

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Based on Cases discussed at the Weekly PIG Clinical Meeting on 13th April 2017.
Publication date 27th April 2017.
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: *Long Distance Preparation*

A 60 year old patient from a rural town (400 kilometres) was scheduled for a laminectomy. She was seen in the clinic on the day before the operation. She was noted to have severe respiratory disease:- On home oxygen; FEV1 700mls; Limited exercise capacity (walking maximum of 100metres with the aid of 4WW). Her symptoms requiring surgery were unclear, but she felt that her legs were weak. The patient herself was not convinced that the surgery would improve her, but it had been booked by the neurosurgical registrar. After discussion, the surgeons reviewed and agreed that the operation wasn't indicated. A trial of epidural steroid injection is suggested.

There was general frustration that this could have been avoided by better long distance preparation, including gathering more information by phone to the patient. Do we have a cultural resistance to speaking to patients by phone? (Note there can be workload getting the call organised, and patients/family may be shocked if a Doctor rings them unexpectedly. Hence it can be a good practice to get a nurse or secretary to ring first to prepare the patient.) After enthusiasm a few years ago, the use of telehealth (i.e. video) consultations seems to have become less common. There is some "push-back" from rural hospitals as they are already overwhelmed with their own patients. This is for assessment by both nurses and anaesthetists at hospitals closer to patient home. Nurses are at times resistant to performing triage for distance patients due to uncertainty re responsibility. There was general agreement that we should look for way to improve sharing of care between centres including distant assessments. We should also encourage surgeons to call us at the time they are contemplating booking the patient for surgery, rather than just book the patient for review in our clinic.

TOPIC 2: *Epidural with reluctant consent*

A 61 year old man with marfanoid features is booked for an open aortic aneurism repair. He has some history of vascular disease (presumably relating to smoking history), but is otherwise reasonably "well". He has significant anxiety issues, and continues to smoke a pipe. He uses 50 grams of tobacco every 3 days, (which he says equates to about 10 cigarettes a day). He insists that whilst in hospital he must continue to use a pipe but will use it as a "dummy" i.e. won't smoke but will use it in his mouth etc. Prolonged discussion in the clinic did not change his position that he would continue smoking a pipe until shortly before admission (although he conceded he would try and cut down as much as possible) but then use a "dummy pipe" whilst in hospital.

He was also very reluctant to consider an epidural:- after discussion and explanation he absolutely refused to have it mainly due to anxiety and needle phobia issues although he does report some pre-existing back problems. On the next day, he rang the clinic nurse to say that after discussion with his daughter (an RN) he would agree to an epidural.

Question:- Would it be appropriate to perform an epidural in this circumstance?
Discussion: - There were mixed opinions. A majority felt that given his apparently "reluctant" change of opinion about an epidural that the surgery should proceed without an epidural and use TAP and wound catheters for analgesia. Others felt that in general we should continue to push hard for an epidural for surgery, and the issue of consent should be revisited on the day of surgery. The procedural anaesthetist has been given advance warning. Surgeon re-notified regarding pipe-smoking.

"From the Trough"

Perioperative Interest Group Notes

Based on Cases discussed at the Weekly PIG Clinical Meeting on 20th April 2017.
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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: *Failed Epidural – What Dose of spinal?*

Patient 27 weeks pregnant with twins BMI 55 in labour (ruptured membranes):- had an epidural inserted for analgesia which appeared to have some effect but was "patchy". 3 hours later it was decided to go to LSCS. The epidural was topped up with 20mls of 2% lignocaine in increments but remained very patchy with no motor block, analgesia to T8/9 at best. It was decided to perform a spinal. What dose should be used?

Discussion: - Trend in recent years has been to go to higher doses for spinals (as opposed to 15 years ago, when a low dose was seen as desirable: Going back 30 years doses were generally about the same as they are now. The shift to higher doses has been accompanied by general acceptance of using metaraminol infusions…) In this situation, opinions varied from 2.1mls to 2.8mls of heavy marcain – all with some intrathecal opiate. For the case discussed, 2.4mls was used which gave a block to just below the nipples. A standard 90ml 25 gage needle was used.

But why did the block fail? Opinion expressed that in heavily obese women, moving around in labour, the epidural catheter is dislodged by traction, as the subcutaneous fat layer moves back and forth over the spine. CSE was not considered as it felt it would have complicated the spinal without advantage. Some disagreed with this point of view and would have used it to facilitate getting the needle through the over lying fat. If the first spinal dose hadn't been successful what then? – Should a second spinal be attempted if no obstetric contraindication? All would have gone to GA as the next option. Ultrasound mapping of the vertebral spaces could be considered for the first attempt.

TOPIC 2: *Preparing for massive blood loss*

A 69 year old man was booked for a right hepatectomy and caval reconstruction due to primary hepatic cancer. He is otherwise reasonably well and fit, BMI 27. The case requires preparation for massive blood loss

Discussion #1:- Blood studies show Hb107 Ferritin of 712, Iron 3, Tranferrin Sat 7% Tranferrin 1.7 Comment Ideally CRP should be added when testing for iron stores. As part of an inflammatory response, ferritin may be raised and this may obscure iron deficiency. In this case iron deficiency is excluded on the extremely raised ferritin level.

Blood group shows JK (i.e. Kidd) antibodies. It was presumed this may interfere with availability of blood and thus cross match of 4 units was requested. Comment:- Check with haematologist whether this is adequate preparation to ensure supply of appropriate blood. Significance of this antibody is not clear.

Cell savers are now considered acceptable for used with cancer, as malignant cells are removed by the cell washing process.

Autologous pre donation is not supported. *Why?* Most of the hazard from transfusion is not associated with the immunological matching of the donation, but other risks such as storage lesion (bacterial contamination etc.) or giving wrong blood. Thus autologous pre donation increases the likelihood that the patient will be anaemic pre-operatively or intraoperatively. Further, it is well recognised that anaesthetists and surgeons will tend to give blood more frequently if the blood is autologous *"giving her own blood back")* hence the overall

transfusion rate is increased, and most of the risk per unit transfused associated with transfusion remains, so overall risk of transfusion reactions is increased. For this reason autologous pre-donation is not supported by the blood service, with the exception of vary rare blood groups.

Isovolaemic hemodilution provides minimal benefit in terms of avoiding transfusion (a mean benefit of 2 to 300 mls) thus is not generally regarded as an effective strategy.

SEE ARCBS website

Discussion #2:- The surgeon has given 0.5 mgs of dexamethasone BD for 2 weeks. Why? Discussed with surgeon: - This was given for this patient because she was symptomatic with systemic affects from tumour necrosis (nights sweets, anorexia etc.) the modest dose of gluco coracoid should settle some of these symptoms and make the patient feel better.

TOPIC 3: *Spirometry in pre-op clinic*

What are the appropriate indications for spirometry?

Discussion:- There was a general feeling that we may be doing excessive spirometry measurements at present. Appropriate patients would be smokers, diagnosed asthma or COPD, or patients with symptoms suggestive of asthma or COPD. In general in the community, the diagnosis of asthma is done poorly with both over- and under-diagnosis. Diagnosis requires a Bronchodilator challenge involving 6 puffs from an MDI, and using a spacer. Reversability greater than 12% of FEV1 is diagnostic of asthma. But diagnosis make a difference anyway? This would depend on whether it assists risk assessment, and whether the timing of surgery can be varied to enable pulmonary optimisation. Pulmonary rehabilitation for severe COPD conducted by physiotherapy is "simple", however it is effective at improving outcome of patients with chronic airways disease. It was agreed that we need to develop a more systematic approach to pulmonary rehabilitation in the preoperative setting.

TOPIC 4: *Single organ doctors not discussing patients*

(a) A 60 year old female was booked by ENT registrar for a nasal septoplasty. She has multiple significant medical problems, and it was not clear that the surgery was anywhere near her major concern. A letter was sent to the surgeons and to the general practitioner suggesting general medical optimisation and reconsideration prior to surgery. Subsequently, a cardiologist reviewed the patient, including sestamibi, and suggested that she had a low cardiac risk. *"She has many other medical problems but surgery on her nasal septum is a relatively minor procedure that can be done safely with skilled anaesthetic support".* The geriatricians noted many problems including cognitive decline that may be associated with sleep apnoea, and noted that she is booked for sleep studies in 6 months' time, but did not intervene further.

It is still considered that the proposed surgery is of little overall consequence:- After reviewing the above reports, the sleep lab has been contacted to bring the sleep studies forward, given the significant medical impact that her clinically apparent sleep apnoea is having on this patient.

(b) A patient with a history of high steroid therapy for many years and subsequent adrenal suppression and myopathy causing generalised muscle weakness (maximum work of breathing 24% of predicted). Patient is booked for a hernia repair. After initial consult in clinic, he was reviewed by respiratory physicians and endocrinologists. The endocrinologist recommended an approach to managing the steroid therapy perioperatively, having assumed that the steroid therapy was necessary for the patient's respiratory disease. The respiratory physicians felt that the steroid therapy was unnecessary for the patient's lung condition, but presumed that the endocrinologist would have reduced the dose if that was possible, and thus suggested respiratory management for the perioperative period. After bringing these two letters together, and further communication, the endocrinologists are now in the process of reducing steroid therapy.

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Perioperative Interest Group Notes

Based on Cases discussed at the Weekly PIG Clinical Meeting on 27th April 2017.
Publication date 4th May 2017.
Website: www.perioptalk.org

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TOPIC 1: *Patient refusing opiates*

A 60 year old gentleman is booked for ankle fusion as a semi-elective procedure. He emphatically and absolutely refuses to have any opiates because of previous severe hallucinations post operatively when given opiates. He says that he is prepared to put up with any pain as a result. Other history:- IHD (AMI and coronary artery stenting); heavy ethanol intake (litres of wine per day); heavy smoker; thrombocytopenia (50) noted at preoperative clinic one week prior to surgery. At that time he had stopped drinking 1 week ago (i.e. 2 weeks before surgery) and had stopped smoking. How should his pain be managed?

Discussion: - The smoking and alcohol cessation makes a good reason to proceed now. Sciatic nerve catheter preoperatively could be a good option and should give him reasonable analgesia. This could be combined with a saphenous block although local infiltration by the surgeon may be just as effective for analgesia. The thrombocytopenia makes spinal relatively contraindicated. Even though he reports that he has already stopped alcohol, he should be managed for acute withdrawal. This will probably include a baseline diazepam dose. He should get thiamine and folate supplements. Ketamine was discussed for analgesia adjunct: - opinions varied from an emphatic 'no' (in view of previous hallucinations) to 'maybe'. Clonidine would be good to add to post-operative management. Despite his 'absolute' refusal, it was felt worthwhile talking him into a trial of opiates (presumably starting with fentanyl), as it is hard not to consider that the post-operative hallucinations may have been more related to alcohol withdrawal than to opiates.

TOPIC 2: *Missed steroid supplementation*

A 60 year old women presents with a history of voice change and inspiratory stridor due to a tight (4mm) subglottic stenosis that has developed over the last 6 months. The cause is still unclear; however it is increasingly suspected that it may be part of a complex autoimmune syndrome, or Wegener's granulomatosis. She has been on steroids (40mg hydrocortisone per day) for 2 years, initially due to 'joint aches and pains'.

She reports that with her previous admission (just before Christmas) she was admitted initially as a day stay patient for a bronchoscopy, biopsy and dilatation. She received a single shot of additional hydrocortisone at the time of surgery (75mg hydrocortisone). For surgical reasons she was kept in hospital. She felt "lousy" and tired as well as having jaw pain and a sore throat the next day. After three days she still felt profoundly unwell, nauseous, tired and weak. It was then realised that she had not had her regular cortisol. She was given some intravenous hydrocortisone, and reports that 'within an hour' she felt back to normal.

Discussion: - A great description of a postoperative Addisonian crisis. It would seem that the "slices of cheese" all lined up. She does not have a clear diagnosis of Addison's, but she is obviously steroid dependent, thought to be due to steroid-induced adrenal suppression. It was Christmas; She was initially day stay but unexpectedly kept in hospital; Charting of regular medication never occurred. Hence a classic 'near miss'. (Question: - Is the adrenal suppression really due to previous steroid dose or does she have primary Addison's syndrome? Her physician is following up…)

TOPIC 3: *Is an echocardiogram a cardiology consult?*

A 27 year old women pregnant with twins reports quite marked dyspnoea, meaning that she cannot lie flat. There is a cardiac murmur. It is felt appropriate to order an echo. Does this imply a cardiology consultation?

Discussion: - It is accepted by the cardiologists that other specialists may order an echocardiogram, and this is performed as a diagnostic service. Therefore the cardiologist will report on the scan itself, and interpret the scan in accordance with the clinical details presented on the request, and their report will address the questions in the request. However, this is not a consult. Therefore, if a consultation is required, this needs to be requested specifically.

If there is a significant unexpected acute problem identified incidentally, the diagnostic service is ethically and professionally obliged to act on that, however otherwise it is reasonable for them merely to report incidental findings and expect that the requesting doctor will read their report and act accordingly.

Similarly, a radiologist will report on a requested examination, and report incidental findings. If these are not acute and highly significant clinically, they will take no action other than to include a comment in the report. This is an all-to-common scenario with regard to incidental findings of malignancies on 'routine' chest X-rays. The professional obligation is on the part of the doctor who requests the examination to read the report.

TOPIC 4: *Ventricular bigeminy and sinus bradycardia*

A patient presented on day of surgery having travelled 150km. He had previously been examined by GP, at which time no particular abnormalities were noted with regard to his cardiovascular system. In the pre-op area, his pulse rate was noted to be 35. He was otherwise asymptomatic and felt normal. The patient is a 60 year old obese retired truck driver, smoker, hypertensive, type 2 diabetes, possible OSA. ECG was preformed showing a sinus bradycardia with ventricular bigeminy. Should surgery proceed?

Cardiology (i.e. advanced trainee) was consulted, and advised that it was reasonable to proceed. They indicated that the normal treatment for bigeminy would be beta blockers to suppress the ectopic beats. The anaesthetist wasn't confident to proceed to surgery on that basis, concerned about additional vagal stimulation perioperatively, and the lack of clarity re cause. The patient was postponed for an echocardiogram. (Later this was more or less normal.) What else could have been done?

Discussion: In the circumstances, it was felt reasonable not to proceed with this elective procedure. It was then discussed at the perioperative cardiology meeting. Increased vagal tone may have been stimulated by the anxiety of coming to hospital. The particular point of concern is to establish that the patient can raise their heart rate under physiological stress. A Holter monitor demonstrating appropriate tachycardia with exercise would be sufficient to demonstrate this. Just taking the patient for a walk around the hospital may have established this as well. An alternative strategy could arguably have been a small dose of atropine, to speed up the sinus rate and eliminating the bigeminy, but is less clearly demonstrating a 'physiological' response. (And is that treating the patient or the Doctor?) Given the number of risk factors this patient has, an echocardiogram and Holter recording would seem to be not unreasonable investigations.

"From the Trough"

Perioperative Interest Group Notes

Based on Cases discussed at the Weekly PIG Clinical Meeting on 4th May 2017.
Publication date 11th May 2017.
Website: www.perioptalk.org

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TOPIC 1: Seeing a patient with new eyes?

A 64 year old female is booked for removal of Multiple SCCs on her leg and split skin graft. She is normally "well" but has recently had problems with 'vertigo', 'falls' and 'feeling depressed'. She was accompanied by her husband. They reported the GP has organised multiple investigations without result. On examination the patient had very obviously low affect, was poorly responsive to the environment, tearful and appeared to be markedly depressed. They reported that three years ago she and her husband had enjoyed going dancing, but she has deteriorated dramatically since then. Husband was not clear about medical management, but thought she had seen a psychiatrist and a neurologist and had used some anti-depressants previously. She was not on antidepressants now…

Discussion:-
What to do? Even if the patient had tried anti-depressants in the past, maybe they had not been tried adequately. It may be that the GP has become gradually accustomed to the patient's health state, and 'is not seeing' what is obvious to someone with fresh eyes. Clarify exactly what the couple meant by a psychiatrist. It might be that the patient has seen a counsellor or a neurologist rather than a psychiatrist. There would appear to be no particular reason to postpone this type of surgery, but there is a clinical/ethical obligation to clarify the situation with regard to what appears to be severe endogenous depression. (Post discussion:- Follow up with the GP indicated in fact that the patient had not seen a psychiatrist. (She had seen a psychologist about 12 months ago). GP care had been intermittent of late:- the GP agreed that they may not have been noticing what was obvious to a new medical observer.

TOPIC 2: Preoperative Smoking Cessation

43 year old women booked for total hip replacement. Past History of poor lifestyle choices:- Hepatitis C, IVDU, Ethanol 60grams a day, heavy smoker. She is not diagnosed with lung disease however spirometry in clinic shows FEV1/VC 0.9/1.9. Her chest is clear to examination and she is not acutely unwell. There is three weeks until surgery. Is it worth stopping smoking Should we postpone?

Discussion: - The patient must be strongly encouraged to stop smoking. (Note that some, but not all orthopaedic surgeons cancel active smokers). In three weeks, if the patient stops smoking (both for lungs and wound healing after surgery) and has a respiratory medicine assessment and commencement of puffers (Ipratropium and salbutamol, plus possible steroids) then it would seem reasonable to go ahead with surgery. Offer NRT patches and advise contact with QUIT line (137848) to assist developing a Quit plan, and for telephone-based support.

There are some different opinions about the smoking cessation prior to surgery. The recommendation from ANZCA is that smoking cessation before surgery is worthwhile at all times. Some workers have previously suggested that short term smoking cessations for surgery is not appropriate and increases respiratory complications, however the validity of this work has been strongly disputed. (Ashley Webb, Anaesthetists from Melbourne (Frankston) has written a n excellent review on this topic in the College 'Blue Book' and recently received an ANZCA Research grant to follow up on his previous research on preoperative smoking

cessation (references). Formal pulmonary rehabilitation has value to reduce respiratory complications perioperatively, however the lead time for improvement is longer.

TOPIC 3: Advising about clinically diagnosed 'Allergy'

A healthy woman of 38 having hand surgery under GA was given a small dose of cefazolin in the anaesthetic bay, which caused transient severe nausea. About 5 minutes later she was given the rest of the dose, which caused further nausea and development of a generalised rash, accompanied by tightness in her chest and throat. She did not develop hypotension, tachycardia, and the rash and subjective tightness in the chest settled over about 10 minutes. How should this be managed?

Discussion: Even though the symptoms resolved reasonably quickly, it helps to clarify the diagnosis if tryptase is measured. This event could represent an IgE anaphylaxis phenomenon, although it is unlikely. (i.e. it is worth investigating, although it is most likely a non-immunological reaction). Even though it seems clear that the patient has had a 'reaction' to cefazolin, she should not be told that she is *'allergic'* without testing by an immunologist. No advice should be given to avoid penicillins. In this case the immunologists were agreed testing was appropriate. They request referral using the standard ANZAAG referral forms (Australian and New Zealand Anaesthesia allergy group) www.anzag.org.

TOPIC 4: Discussion:- Booking Patients for ICU

There is wide variation and lack of a "common language" to guide booking of patients for ICU. There is considerable variation in practise between different anaesthetists about whether a patient requires postop ICU/HDU. In discussion with surgeons, it is suggested that the NSQIP Risk Stratification Tool should be used to guide booking. It is suggested that risk be calculated without use of the final "fudge factor" to adjust for severity of the case:- That an institutionally agreed predicted mortality should be a mandatory indication for ICU booking. Other patients (with a lower predicted mortality) may be booked if the doctor preoperatively considers there is particular risk:- these cases to be discussed on a case-by-case basis. The use of the risk prediction model data will give a standard language to guide booking. The plan is to use this system for 2 months and then audit the outcomes.

The effectiveness of postoperative ICU access in reducing mortality is controversial:- a recent publication derived from the ISOS study, (led by Rupert Pearce) suggests that if there is good "routine" nursing and medical care on the wards, then the reduced hospital mortality associated with access to ICU is eliminated.

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Website: www.perioptalk.org

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TOPIC 1: *Coordinating chronic and acute pain services*

A 16 year old diabetic on metformin and insulin, PCOS, and complex pain syndrome is booked for discectomy. Due to some compliance and social issues, and on instruction of the paediatric endocrinologist, admission is planned for the day before surgery for an insulin infusion. Patient is also under the management of the chronic pain service, however pain management consists of Panadol Osteo and non-pharmacological methods. The chronic pain service has specifically said they will not be involved in acute pain management for this patient. There was no clear documentation beyond this. Question: How to co-ordinate pain management? **Discussion:** - There may be both staffing resource limitations and deliberate patient management issues driving the chronic paediatric pain service's reluctance to be involved in acute management. Their involvement at the time of surgery may feed manipulative or catastrophizing behaviours, and regardless, chronic pain management (particularly in this type of situation) is different from acute post-surgical pain management. Nevertheless the acute pain service needs to be aware of the overall therapeutic plan and understand the rationale for the chronic pain service staying out of acute pain management for this patient. The case reinforces the need for communication between treating teams.

TOPIC 2: *The happy alcoholic*

A patient being admitted for planned surgery is an active, 'happily stable' heavy drinker (120grams or more per day). What is the role of the drug and alcohol service in this patient? How should the patient be managed? It was noted that faciomaxillary surgery has been admitting patients up to four days prior to surgery for detoxification.
Discussion: 1. Assessment of ETOH consumption 2. If consumes ETOH > 10 std drinks per day, then needs adm 3-4 days preop for ETOH withdrawal. This should be arranged in consultation with surgeon and D&A Liaison Service. If patient refuses then discussion with the surgeon regarding the risk benefit of proceeding as very likely to experience withdrawal delirium.
3. If patient drinks 5-10 std drinks per day every day, then counselled to cease drinking 3-4 days prior to hospital adm. Inpatient ETOH withdrawal service via D&A Liaison service e.g. Lakeside at Belmont may be available to assist patient.
4. Polysubstance pts- i.e. ETOH plus other drugs should be discussed with D&A Liaison Service
For patients with opioid dependence on a community replacement program E.g. Methadone program - please advise them to only get enough takeaway doses to last up to the day of admission.

TOPIC 3: *Objection to Gentamicin*

A patient being prepared for urology surgery indicates an absolute and 'irrational' refusal of consent to gentamicin therapy. This is based on a distant relative with an adverse reaction to the drug. What is the appropriate response?
Discussion:- Rationally, gentamicin toxicity is a minimal risk in this patient. Nevertheless there are multiple drug alternatives for its use. Given the patient's refusal. it would be appropriate to discuss the problem with the surgeons and Infectious disease consultants. Review the indication, and 'marginal of advantage ' of gentamicin of other alternatives, looking to use alternatives if at possible. If urine microbiology indicates particular need for gentamicin this could then be discussed with the patient as a particular problem with therapy based on that evidence. rather than 'routine use' of the drug.

TOPIC 4: *Jehovah's Witness Children*

A 2 year old with an acute abdomen (which turned out to be a perforated Meckels) is being prepared for surgery. The mother says that she is a Jehovah's Witness and would not wish her child to have a blood transfusion, although she is happy for the child to receive component therapy. How to discuss?
Discussion:- The law is clear that if the child needs a blood transfusion the anaesthetist is legally allowed (and is obliged) to transfuse. Opinion:- The discussion with the parent doesn't need to start with aggressively pointing out the legalities. An appropriate format may be to thank the parent for the information. Reassure them that it is very unlikely that the child will need a transfusion. Say that if it becomes necessary I will call you to explain (if there is time,) but that ultimately neither the parent nor the anaesthetist has any choice in the matter:- if the child's life is at risk then the law is clear about both consent and the legal obligation to transfuse. Note that other anaesthetists (not in this discussion) have said that they would just not discuss with the parents at all, would transfuse if necessary, and would deal with the consequences afterwards. Another view is that the appropriate approach in this situation is similar to a traditional priest. The role is to listen, to advise what is to happen, and to (more or less), absolve the family of their own guilt associated with feeling responsible for the decision. It should be made clear that it is not their decision, and that they are not 'committing a sin'. But there is no right answer....

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Perioperative Interest Group Notes

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Discussion:-

TOPIC 2:

Discussion:-

TOPIC 3:

Discussion:-

TOPIC 4:

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Perioperative Interest Group Notes

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TOPIC 1:

45/F for umbilical hernia repair. This hernia had been found on a CT scan of her abdomen and pelvis to investigate bilateral pedal oedma. She was planned for surgery in one week.

BG: morbid obesity (167kg, 167cm, BMI 60), peripheral neuropathy (?B12 deficiency), smoker – current

This lady reports dyspnoea, worsening over last 12 months, in addition to her leg oedema. She has limited exercise tolerance around her home. Further previous investigations had included a relatively normal Echocardiogram and CXR. Her spirometry demonstrated a FEV1 of 70% of predicted with minimal obstruction. She had a presentation to ED with a discharge diagnosis of heart failure. She reports starting daily frusemide with no further issues.

A discussion was had with the surgeon caring for the patient. They reported that she had transverse colon in the hernia and was at risk of incipient incarceration and need for urgent surgery. The operation should be done sooner rather than later, and electively rather than urgent.

Discussion:-

Need for further investigations into new onset SOB, what investigations would be appropriate. Suggested that non-invasive testing for myocardial ischaemia would be appropriate given risk factors.

Outcome:

The patient had an outpatient sestamibi scan that was normal. She was advised to cease smoking preoperatively and will proceed to surgery. The surgeon has advised weight loss and advised of the high risk nature of this procedure.

TOPIC 2:

68/M for extensive resection of BCC in ear, including temporal bone excision and rotation flap.

He was seen with his wife.

His background medical history includes:

- AF – on apixaban
- CVA (December 2015) – posterior cerebral artery circulation. He required 3 months in hospital and rehabilitation. His current long term disability is unsteady gait – although he can get up 5 steps at home and walk around his house unaided. His wife reports some mild short term memory deficits,

however this is difficult to assess due to his profound deafness. He has not had any formal geriatric assessment.
- Ex-smoker 2015 (>50 pack years) – no formal COPD diagnosis
- Normal renal fuction

Discussion:-

Discussion was had with family and patient about advanced care directives and appropriateness of proceeding with surgery. Family had discussed these issues extensively and understood risks. They wanted to proceed to surgery.

Discussion about perioperative anticoagulation. The surgical team had requested clexane cover with extended cessation of NOAC. He would be considered moderate to high risk due to his previous CVA within 18 months. His apixaban was stopped 5 days preoperatively, and he was covered with clexane for 3 days prior to surgery. The risks and benefits of this approach were discussed. It was noted that generally NOACs are not bridged prior to surgery.

Suggestions were made around baseline neurocognitive testing to aid with assessment of cognitive function. There was discussion about the most appropriate test, and whether referral to geratric service or brief testing in clinic would be sufficient. The limitations of MMSE were discussed. Other options include the RUDAS test, Minicog and Abbreviated mental state score.

TOPIC 3:

76/F for elective repair of prolapsed uterus

BG:
- IHD: post-operative NSTEMI, medical Mx
- COPD: severe, FEV1 0.4L. sats 88% on RA
- anxiety

Recent anaesthetic for vaginal repair – spinal converted to GA after multiple doses of midazolam and ketamine during prolonged procedure. Successfully extubated but post-operative NSTEMI on ward. On arrival in anaesthetic bay for this procedure patient was very anxious and visibly SOB.

She had been seen in clinic and it was documented only that the discussion involved “spinal vs. GA”, with emphasis on severe lung disease and likely need for spinal anaesthetic. It was difficult to elicit severity of symptoms/impact on patient. Patient became very anxious about the risk of proceeding and whether or not she should go ahead. Procedural anaesthetist asked what others would have done at this point.

Discussion:-

The patient had been made aware of her high risk of anaesthetic prior to presenting for surgery. It was felt that by attending she had accepted those risks and wanted to go ahead.

Spinal vs. GA – while a spinal avoids the risks associated with a GA, the patient did not tolerate this previously; also may not tolerate the lithotomy position for a prolonged period of time

LMA vs. ETT – suggestion that an LMA allowed for a more gentle induction, however some felt that they would prefer to have an ETT in place with the risk of bronchospasm or difficulty ventilating. However it was noted that intubation possibly increased the risk for bronchospasm with increased airway instrumentation.

Outcome:

It was decided to proceed straight to GA given previous intolerance of spinal and sedation, and the lithotomy position.

Patient had a GA with ETT, surgery lasted 3.5 hrs and patient was successfully extubated and discharged to ward.

TOPIC 4:

26/F for LSCS

A Syrian refugee was seen in pre-op clinic with an interpreter. Documented 2 x previous LSCS under spinal, with no complications. She was consented for spinal anaesthesia.

It was documented in RFA "female doctor to do procedure if possible", this was not noted in the preoperative consultation, however, the procedural anaesthetist had noted it in their chart review on the day prior and had liaised with the DA about swapping for the case.

The patient arrived in bay expecting a GA. The male anaesthetist discussed the pros and cons of GA vs Spinal. Initially the husband was not present as it was expected that a GA was taking place. The husband was brought to the theatre to be a part of the discussion.

On further questioning had probably had prolonged PDPH with two previous LSCS. This history had not been elicited in clinic. This may relate to the character of needles used in lower income countries. After further discussion the case proceed under general anaesthesia. This was done by a female anaesthetic registrar.

Discussion:

Difficulties of history-taking through an interpreter and cultural barriers, possibly why previous issues were missed in clinic.

Discussion about our capacity to provide male vs female anaesthetists for these cases and the ethics of such decisions. It was noted that the obstetric team for the day were both male doctors, with limited flexibility to provide female consultant.

Discussion around patient-centred care vs. service delivery

"From the Trough"

Perioperative Interest Group Notes

Based on Cases discussed at the Weekly PIG Clinical Meeting on DAY MONTH 2017. Publication date 15th June 2017.
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:

80 year old female. Morbid Obesity (134kg), Asthma (mild), Type II DM (few complications), OSA (intolerant of CPAP), H/T, GORD (controlled), exercise tolerance 80m. Grade 1 Endometrial Ca. Not suitable for LAVH or conventional vaginal hysterectomy – offered for TAH. Patient and surgeon concerned about operative risk. Patient ambivalent about surgery. Alternative treatments available. NSQUIP suggests 1% mortality. Plan: Obtain median survival times with non-operative interventions from surgeon, consider likely remaining life expectancy then have further discussions with surgeon, patient and anaesthesia consultant re preferred treatment. If surgery is offered, then she should have cardiopulmonary rehab prior to surgery.

TOPIC 2:

33 year old male. Morbidly obese (now 170kg from 180 or so, 172cm tall) Strong family history of colonic polyps and colon cancer. OSA on CPAP. Echo showed OK right ventricle, PASP not able to be measured. H/T. Needs colonoscopy. Patient has had recent good success with weight loss and wondered if procedure might be deferred for 1-2 further months to allow for further weight loss and reduction of procedural risk. Plan: Contact Alkesh Dhawan regarding risks of waiting longer to do procedure. Patient should not be done in the endoscopy suite, but instead in theatre with appropriate manual handling and airway equipment.

TOPIC 3:

68 year old female. Morbidly obese (BMI 42). Poorly controlled GORD despite PPI. Jehovah's Witness. For gastroscopy & colonoscopy because of positive faecal occult blood test and poorly controlled reflux. Chronically anaemic, but not iron deficient. Was on proceduralist only list, but sent to HEAPPS because she is a JW. Is being planned for and L4/5 laminectomy for low back pain. No particular issues regarding JW status for the endoscopies. Plan: Given poorly controlled reflux with water brash, patient should be on an anaesthetic list for airway protection.

"From the Trough"

Perioperative Interest Group Notes

Based on Cases discussed at the Weekly PIG Clinical Meeting on 22nd June 2017.
Publication date 30th June 2017.
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:

A late add to clinic, 62 year man for proposed gastrectomy for distal oesophageal carcinoma. Surgeons hoping for an answer re suitability within 24 hours, so as to guide what sort of chemotherapy to commence.

His clinical status was:

1. Marked obesity, 126kg, BMI 40. significant OA in hips and knees left him using 2 walking sticks, with maximal METS = 3 at best
2. OSA - using CPAP but? Not very effective. notable somnolence even during clinic assessment
3. previous DVT /PE, and distant Hx of epilepsy
4. nil documented IHD, but had not stressed his heart for a long time

Discussion:-

Not enough known about his reserve capacity, or cardiac function, or ischaemic risk. Pros and cons of CPET versus stress echo discussed or other cardiac imaging.
Given borderline nature of his fitness for surgery, the opinion of an anaesthetist frequently involved in these cases should be sought is there a role for prehab?

Plan:
Book a stress echo, speak to Dr Eissa, aim for another clinic review. Tell surgeons we cannot say yet.

Subsequent outcome; by next morning, surgeons had decided not to offer operative treatment anyway.