“From the Trough”

Perioperative Interest Group Notes

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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: How much do you trust an Echo?

A 77 year old is booked for a laparoscopic right hemi colectomy for suspicious polyp previously had been admitted 6 month ago with an infective exacerbation of COPD and new onset of rapid atrial fibrillation. Echo at this time showed severe pulmonary hypertension with a peak pulmonary artery pressures of 70 and mean of 55. He was treated with rake control and anticoagulation (and antibiotics etc.) Two weeks later an echo showed PA pressures “normal” moderate aortic stenosis ($1.2cm^2$) preserved are the and no RVH. Patient is still in atrial fibrillation but with good rate control and good exercise tolerance. Questions:- What is the significance of the marked difference in echo cardiograph? Why not cardiovert????

Discussion:- The second echo would be regarded as most reliable. There would be physiological changes associated with the acute decompensation, but regardless the variation emphasises the degree of operator dependence and subjectivity of echo cardiograph. It is easy to be “fooled” by the numbers in an echo report that may give a false sense of certainty about the findings on echocardiography. Ultimately it is a subjective interpretation by an operator of findings that may be under difficult circumstances.

TOPIC 2: Immunomodulators and novel biological therapies

86 year old man for carotid endarterectomy has had 6 episodes of amaurosis fujax. He is a typical vasculopath (e.g. right below knee amputation and pressure ulcers and cellulitis on left leg). Also has chronic myeloid leukaemia treated with imatinib. Questions:- What is the perioperative management of imatinib?

Discussion:- A recent published guideline on perioperative antirheumatic medication (including immunomodulators) gives useful advice about some established antirheumatic therapies but Imatinib is not listed. (The guideline is on the Perioptalk site.) (Advice from I.D./Immunology) This field of drugs is exploding, and it is virtually impossible to avoid having to consult about each drug individually. Pragmatically, they all result in an increased risk of opportunistic and perioperative infections, but in general this is not as severely increased as was initially feared. In general, they are considerably safer (from an infection point of view) than cancer chemotherapies or immunosuppression due to high-dose (or medium-dose) steroids. In the perioperative setting, it may therefore be appropriate to be particularly cautious with regard to perioperative antibiotic therapy, and consider the risk of indwelling epidural or other catheters etc.

TOPIC 3: Unexplained Dyspnoea

A 78 year old booked for a lumbar fusion has very significant back pain despite being slim. Recent episode of atrial fibrillation, successfully cardioverted (echo at that time apparently was not concerning.) Now has “Asthma” with minimal exercise tolerance (multiple stops on 1 flight of stairs) but not due to pain. Spirometry is normal. Chest X-ray is normal. He has good oxygen saturations and a good effective cough. His dyspnoea was previously investigated without conclusions being made, (although it is unclear if all possible/appropriate investigations were completed). An exercise stress test three years ago was limited by onset of dyspnoea. A steroid injection 1 week ago has improved her back pain. Question:- Is another investigation appropriate?

Discussion:- Surgery can wait – which implies that investigations need to be completed…. It seems difficult to explain the severity of dyspnoea given other lack of findings. Need to check the echocardiogram result – Echo reports are subjective, hence it may need to be specifically reviewed (or repeated) to exclude primary pulmonary hypertension, or secondary pulmonary hypertension due to embolic disease. Despite all other respiratory findings being normal a risk review by a respiratory physician would seem appropriate. The referral needs to make clear exactly what the issues being considered are. "The quality of the consult is a function of the quality of the referral."

TOPIC 4: The NSW Agency for Clinical Innovation

The Agency for Clinical Innovation is one of the "four pillars" of the NSW Health System, established as a result of the recommendations of the 'Garling' Commission of Enquiry in 2010. Apart from the service delivery sections (i.e. the Local Health Districts) the four support pillars are ACI (the Agency for Clinical Innovation), the BHI (Bureau of Health Information), HETI (the Health Education and Training Institute), and the CEC (Clinical Excellence Commission). The Agency for Clinical Innovation is the pillar responsible for developing new models of care and fostering innovation and change within the NSW Health System. After the ACI was established, Tracey Tay was the first Clinical Lead for ACI, a position she held until late 2016.

ACI has multiple networks addressing the range of clinical services provided in NSW. The 'Anaesthesia & Perioperative care Network' is of most interest to perioperative medicine. Current projects that are in progress include:-

1. *Assistants to the Anaesthetist*. This project aims to address the need to develop appropriate training, standardisation and accreditation for Assistants to the anaesthetist:- more or less in accord with the ANZCA Professional Documents on this issue. Michael Amos, VMO Anaesthetist at Concord and Chair of the Anaesthesia Perioperative Care Network has a carriage of this project. A training program for Assistants to the anaesthetist is being developed through TAFE.
2. *Green Theatres*. This project co-led by Andrew Wetherill (Anaesthetist in Sydney) is looking at ways that the environmental impact of anaesthesia and perioperative care can be reduced without compromising clinical care.
3. *Extended recovery model of care - key principles*. This project is attempting to address the perceived need to develop new models of care to provide alternatives to Ward or ICU/HDU Care for post-operative patients. Around the world there is recognition that the conventional choice between surgical wards and ICU/HDU is not addressing the clinical load or clinical need. Within NSW, a project being led by Sean Kelly (ICU Gosford) is a one approach. Elsewhere, Guy Ludrook in Adelaide is looking at alternative models. In Britain a group at Torquay (Swart & Carlisle) examined possible alternative models. In Canada a project in Vancouver has addressed the same challenge. Clearly there will not be one answer but different models are being considered in different places.
4. *Other projects are being undertaken by ACI* include an initial audit and scoping of potential for better integration of surgical, perioperative, and geriatric services (The Integrated Surgical Care Project) and a project raising awareness of central line associated air embolism.