



## “From the Trough”

### Perioperative Interest Group Notes

Based on Cases discussed at the Weekly PIG Clinical Meeting on 21<sup>st</sup> February 2019. Publication date 4<sup>th</sup> March 2019.

Website: [www.perioptalk.org](http://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: Idiopathic Intra Cranial Hypertension – Query Epidurals**

A 26 year old woman pregnant (36 weeks) presents with Idiopathic Intra-Cranial Hypertension, originally diagnosed 2 years ago. Normally asymptomatic (some headaches) on treatment with acetazolamide. This has been ceased for the pregnancy. Headaches are now more frequent but otherwise no neurological changes. **Question:** - Is regional anaesthesia appropriate? A neurologist has said that spinal anaesthesia for a caesarean section would be appropriate (And CSF drainage is one of the treatments for intra cranial hypertension) but the neurologist was unclear about epidurals. UP TO DATE reports rare cases of visual loss following epidurals but this is very rare and thought to be due to sudden increase in CSF pressure. They recommend small increments rather than large bolus of local anaesthetic into the epidural (n.b. ‘small increments’ being no more than 5 mls at a time!!) Overall, an early epidural to reduce straining if labour for vaginal delivery is planned is very appropriate.

The understanding of the pathogenesis of the IICH has changed in recent years, partly due to novel research findings by Grant Bateman and others at John Hunter. It is now felt to be associated with obstruction to drainage from the intracranial venous sinuses. Treatment (when necessary) can be achieved by stenting of the transverse sinus. (See refs).

#### **TOPIC 2: Cystic Fibrosis**

A 21 year old for repair of an incisional hernia has cystic fibrosis. Currently ‘well’ with this. Despite worrying spirometry she remains active – has a two-year old child - and can walk up 2 flights of stairs. Also has a history of a previous superior vena cava thrombosis and ongoing upper circulation obstruction, on warfarin for this.

**Question:** - How to manage? Her pulmonary risk is predominantly determined by respiratory secretions leading to atelectasis and infection. Overall risk is more related to the exercise tolerance than the disconcerting spirometry. Risk can be minimised by aggressive early preoperative physiotherapy to clear her lungs as best as possible. Preinduction nebuliser hydration and active intraoperative humidification may be useful. Continue ‘aggressive’ postoperative physiotherapy. Specific liaison with physio department to clarify why this is needed in a young adult. Optimise non-opiate analgesia but probably impossible to avoid opiates altogether. Preoperative consult with the respiratory physicians was made, with subsequent plan to admit 4 days early for physio therapy and for antibiotic “tune up”. The thrombotic history indicates need for clexane bridging during dewarfarinisation.

#### **TOPIC 3: Unindicated Investigation?**

A 62 year old was booked for a colonoscopy and gastroscopy to investigate 20kg weight loss. She has pulmonary hypertension (mean 40mmHg) and is hypoxic at rest. Not on home oxygen. Very limited exercise tolerance. Still smoking. BODE Score predicts a 4 year survival of 18%. **Question:** - why was she being investigated? Discussed with the gastroenterologist. It seems that she had been initially put on the list for investigation about 18 months ago and has been repeatedly postponed because she was too unwell. The gastroenterologist agreed that it appeared inappropriate and was going to review the patient himself.

**TOPIC 4:**

***Target for BSL correction***

A 57 year old patient presented for after acute stroke with left hemiplegia for emergency Intracranial Cerebral Clot Retrieval. Was in chronic atrial fibrillation and has diabetes. Major stroke occurred at 4 o'clock and was in the interventional lab shortly after 6pm. The clot was retrieved successfully. Blood sugar on admission was 15 and an insulin infusion was used to start correcting this. The HbA1C at the time of admission was 12.8 (most recent previously available HbA1c was 6.3 from 2011). In retrospect, should the blood sugar have been corrected? Discussed with neurologist and endocrinologist. Difficult issue. Probable reasonable that in general, correction of glycaemia should aim for the patients "normal" glucose level rather than a population level. Thus in this case it may have been most advantageous to the patient to aim to correct BSL to (say) 10 rather than 'normal'.