"From the Trough"

Perioperative Interest Group Notes

Based on Cases discussed at the Weekly PIG Clinical Meeting on 15th March 2018. Publication date 11th April 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: Bariatric Surgery in patient with Ischaemic Heart Disease

54 year old man for sleeve gastrectomy surgery in the private sector for weight loss. He is 160kg and has a history of type II DM. He was referred by his cardiac surgeon for bariatric surgery prior to cardiac surgery.

He had symptoms of worsening SOBOE. An elective angiogram demonstrated severe triple vessel coronary artery disease, and CABG was recommended. Given his weight and the increased risks of infection and poor wound healing, weight loss was recommended preoperatively. The plan was to undergo cardiac surgery after losing 40kg. His symptoms were stable and he was being managed on maximal medical therapy.

Discussion:-

1. Preoperative optimisation – to continue medical therapy and aspirin
2. Challenges of anaesthesia for this patient in the head up 40 degrees position for laparoscopic surgery – maintaining haemodynamics during positioning and pneumoperitoneum
3. TIVA vs volatile anaesthesia for bariatric surgery – does volatile anaesthesia offer advantages of cardiac pre-conditioning?
4. Post-operative anti-platelet therapy. The surgeon ceases aspirin in the post operative period due to risk of gastric ulceration. The preference would be to start clopidogrel post operatively and reconsider aspirin again after six months post operatively
5. Use of TOE after sleeve gastrectomy – mid-oesophageal views still obtainable. It would seem prudent to avoid transgastric views, and they may not be attainable given the altered stomach anatomy.
6. What is the risk of reflux in post bariatric surgery patients?:
    - Gastric bypass surgery – considered low risk
    - Gastric mini bypass – higher risk than gastric bypass, particularly of biliary reflux
    - Sleeve gastrectomy – fasted patients have no higher risk than normal
    - Lap band – increased aspiration risk, with highest risk of post-operative symptoms of reflux

TOPIC 2: Neurosurgery and recent DVT

20 year old female planned for C1 and C2 laminectomy, tonsillopexy and Chiari decompression due to Chiari malformation and cervical syrinx. Her symptoms had worsened in the past months with her head aches going from 3 per day to 10 per day and being disabling. A CT of her head had shown a significant increase in the descent of her cerebellar tonsils.

Her history was complicated by a recent iliac vein and IVC DVT in January 2018. This was in the context of a long car trip (Albury!) and taking the OCP. She had treatment with catheter-directed thrombolysis, thrombectomy and iliac vein stent. She was currently taking RIvaroxaban and clopidogrel. They were planned to continue for 6 and 12 months respectively. She had an IVC filter insitu, which was due to come out later in March.

Her perioperative planning involved the Neurosurgeons, Vascular surgeons and Anaesthetists. She would be having surgery within 3 months of a DVT, and having her anticoagulation ceased perioperatively.

Discussion:-

1. IVC filter use : An IVC filter is appropriate if there is a need to interrupt anticoagulation, or if anticoagulation is contraindicated after acute DVT. Problems arise when there is loss to follow-up and patients don't have them removed (e.g. they are inserted by radiologists, but it then becomes unclear who is responsible for organising recall and removal, and the patient 'falls through the cracks', with the filter still insitu, and embedded, many months later.) For this patient, the plan was for removal to be enacted at her 6 week follow up with the Vascular surgeons.
2. Post operative anticoagulation : The plan was to have a graded increase in reversible anticoagulants – heparin prophylaxis, then heparin infusion and with an aim to leave hospital on Rivaroxaban.

TOPIC 3: **Post operative extended thromboprophylaxis after joint replacement.**

There is ongoing wide variation in practice, and controversy about this issue. A common practice has been the use of LMWH. More recently some surgeons have used Rivaroxaban 10mg daily. A recent NEJM article (EPICAT II trial) looked at Rivaroxaban vs Aspirin for extended thromboprophylaxis after 5 days of Rivaroxaban in more than 3700 patients. There was no difference in symptomatic DVT/PE or in major bleeding.

See editorial from NEJM February 22, 2018. It notes that the low-dose aspirin regime is equally effective and cheaper, although it is of interest that only a minority of patients had mechanical prophylaxis. The editorial does not discuss inter-patient variability in response to aspirin.

Garcia D, Hybrid Strategy to Prevent Venous Thromboembolism after Joint Arthroplasty N Engl J Med 378;8:762-3

Despite joint arthroplasty being such a common operation, the evidence is still inconclusive and the debate will continue.