"From the Trough"

Perioperative Interest Group Notes

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.

Date: June 8th 2023

TOPIC 1: Refusal of blood products

Potential LSCS (patient trying for VBAC).

Background

- Previous Emergency LSCS for failure to progress
- Anaemia

Issues

- **Declining blood products**
  - Concern over receiving blood from someone who has had COVID Vaccine.
  - Will only accept if 'going to die' or would like re-discussion if blood transfusion indicated a less emergent setting
  - Patient asking for cell salvage→ currently low stock of disposable products

Discussion

- Ensure all sources of anaemia have been optimized prior to OT (B12/folate/Fe)
- Important to establish exact beliefs behind product refusal and individual products
- Cell saver only gives RBCs, but not clotting factors/ fibrinogen which are important in all massive transfusion settings
- Intra-operative blood transfusion in obstetrics is only really used when there is a real threat of significant morbidity or mortality
- Patient low risk of PPH
- Cell salvage may be a distraction in this setting, where early clotting factor replacement would likely be essential and the patient would accept blood products in a life threatening situation
- **Cell salvage in pregnancy**
  - Potential risk of amniotic fluid embolism and rhesus isoimmunization (no serious adverse events yet reported)
  - RANZCOG recommends cell salvage when >1000ml blood loss is expected, unclear benefit if <1000ml blood loss.
  - **Contraindications**
    - Contaminants such as faeces, haemostatic agents (e.g. gelfoam)
    - History of HITS (ACD anticoagulant may be used instead of heparin)
    - Homozygous Sick cell disease

- **Benefits**
  - No risk of allogenic transfusion reactions/ blood born infections
  - Can be useful when antibodies present/ crossmatching problematic
  - Safely administered along with uterotonics and TXA
  - Salvaged RBCs more physiologic than stored blood (temp, 2,3DPG, pH and K)

- **Disadvantages**
  - Red cells only returned, nil clotting factors
  - Cost of device and disposable, training costs
  - Dedicated staff member used (and must be available)
  - Setup time may limit utility during an E0 caesarean
  - Availability of resources

- https://resources.wfsahq.org/atotw/intraoperative-cell-salvage-in-obstetrics/#:~:text=Cell%20salvage%20is%20a%20safe,risk%20factors%20for%20postpartum%20haemorrhage.
- https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-020-03138-w

Plan

- Discuss with patient and document thoroughly, treat patient as normal as we only give RBCs if absolutely necessary anyway
- Not for cell salvage

TOPIC 2: CDM clinic patient – Whipple's procedure

64yo pancreatic ca. Diagnosed 12/12 ago. Questionable resectability due to proximity to hepatic artery, so had chemotherapy, followed by radiotherapy to improve surgical prospects. Remains uncertain.

Background:

- Quit smoking 12months ago
- Dyslipidaemia
- Pancreatic cancer
- Asthma/ COPD – nil exacerbations this year. Exacerbation last year requiring steroids.

Issues:

- **Perioperative risks:**
  - CPET – results in low risk stratum although some respiratory limitation
  - Frailty score 2

- NSQUIP suggesting low risk of death, 30% risk of serious complication

- **Lack of advanced care planning**

- **Optimisation opportunities?**
  - Prehabilitation specialist arranging local exercise program

Discussion:

- Advanced care planning discussions must always be offered but must be tailored to individual patients and their preferences around discussing these issues.

Plan:

- patient has been referred for advanced care directive
- proceed, nil further optimisation required

TOPIC 3: **Unexplained arrest on induction**

50s male, elective craniotomy and clipping cerebral aneurysm.

Background

- **Cardiac arrest on induction**
  - PEA (nil further info provided)
  - Resolved with adrenaline, episode of VT post adrenaline
  - Experienced neuro anaesthetist
  - Patient anxious ++ since (on background

Issues:

- **? Cause**
  - Tryptases normal
  - Allergy IDT all normal to all agents
  - Cardiac: Normal Troponin, TTE, stress TTE, small QT prolongation, Holter pending

Discussion:

- ? unrecognized drug error

Plan:

- Present at cardiology meeting to exclude
- Could check TFTs – *update – normal*
- Nil suggestions with change in management for subsequent anaesthetic
- Notify procedural anaesthetist

TOPIC 4: Challenging interdisciplinary care arrangements

63yo SCC ear → pinnectomy

Background

- Severe COPD
    - Frequent exacerbations
    - Still smoking
    - Regular steroids for 2yrs, unable to wean
    - Recent commencement of azithromycin, significant improvement
- Lives alone, functional

Issues:

- Multiple teams involved but lack of ownership – ENT, radonc, plastics
    - Patient receiving misinformation (or lack of information) regarding surgical plan, likely cosmetic outcome, effects on hearing.
    - Verdict reached that patient was palliative and only suitable for radiotherapy, although not clear how this decision was made.

Discussion

- Challenging when multiple teams involved but no MDT in place
- Perioperative clinicians/service often ideally placed to coordinate the patient's perioperative journey

Plan:

- Patient requires repeat surgical consultation to fully understand the procedure and provide informed consent.
- Pt seems appropriate for both radiotherapy and surgical procedures

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TOPIC 5: ? capacity post TBI

45yo L with previous aneurysm and decompressive craniotomy → for titanium cranioplasty which may be anticipated to provide some additional neurologic recovery.

Background:

- CVA
    - Long rehabilitation admission
    - Residual language, hemiparesis and cognitive impairment

Issues:

- **? patient capacity**

- Pt refusing to proceed with surgery/ treatment despite high risk of further head injury with no bone flap and expected gains with cranioplasty
- Often refuses treatment and observations in clinic or ED settings

Discussion:

- Assessing decision making capacity
  - Neuro-psych referral for guardianship
  - Emergency guardianship and treatment authority can be provided in more time-critical situations (may be required in this setting)

- How to physically proceed with perioperative care even if guardianship in place?
  - Physical challenges beyond those of a non-cooperative child
  - Restraining adults not ideal or common in this setting
  - Having the guardianship in place may be sufficient to placate the patient
  - For further consideration

Plan:

- Await further conversation with neuro-psych

TOPIC 6: Myotonic dystrophy and large volume botox

37yo hysterectomy + hernia repair → multidisciplinary surgery involving gynae/gen surg

Background:

- Fibroid uterus, significant adhesions, previous failed surgery (unable to access the uterus)
- Myotonic dystrophy
  - Reflux ++, slurred speech and dysphagia
  - Normal TTE and PFTs
- Smoker

Issues:

- **Large Botox dose in context of myotonic dystrophy**
  - Neurologist concerned with dose and potential for systemic absorption and prolonged exacerbation of muscular issues
  - Surgeon feels the high dose botox is essential to success of the procedure

Discussion:

- **Botox use in this setting**
  - Injected into abdominal musculature
  - Takes 2-3 weeks for full response
  - Nil evidence/ literature around high dose botox dose in muscular dystrophy
  - Systemic absorption – risk of headaches, fever, HTN, generalized weakness, dysphagia, subsequent aspiration)

Plan:

- Await further MDT planning between neurology and surgeons
- ? reduced botox dose may be possible