- Fibrinogen administration:
  - Current approach in US/Canada is that fibrinogen concentrate administration is driven by fibrinogen level (common trigger is level <1.5 g/L).
  - We are starting to see a move toward empiric fibrinogen administration, as levels are typically very low early in major hemorrhage.
  - Fibrinogen concentrate is superior to cryoprecipitate because cryoprecipitate has variable amounts of fibrinogen.
  - Fibrinogen concentrate dose = 4 g.
- Calcium administration:
  - Administer calcium (either 1 g CaCl3 or 2-3 g calcium gluconate) after the third unit of PRBCs.
  - Repeat calcium dose for every 3-6 units of PRBCs given.
  - The risk of hypocalcemia is much worse than the risk of empiric administration.

References:

Tranexamic acid during prehospital transport in patients at risk for hemorrhage after injury: a double-blind, placebo-controlled, randomized clinical trial
Guyette FX, Brown JB, Zenati MS, et al. JAMA Surg 2020;156(1):11-20. doi: 10.1001/jamasurg.2020.4350. PMID: 33016996

EM:RAP 2022 July Critical Care Mailbag: Critical Transfusions

CorePendium: Anemia and Transfusion

MacGyver Hacks: Bugs and Enemas

Whit Fisher and Anand Swaminathan

- The enhanced enema
  - The problem:
    - Sodium phosphate enemas are hyperosmotic agents. They work by drawing fluid into the bowel to soften stool, making it easier to move. To be effective, the enema has to be retained in the colon for a period of time.
    - Retention of the enema can be challenging, particularly in those with dementia or psychiatric disease and in those with learning disabilities. These patients are also likely to become constipated.

    - The hack:
        - Place a Foley catheter into the rectum and slowly inflate the balloon.
        - Using a Toomey syringe, administer the enema liquid through the Foley lumen.
        - Tilt the head of the bed down about 15-30°.
        - Leave the Foley and balloon in place for 15-20 minutes (enema retention time).
        - Deflate the balloon and remove the Foley (and make sure to get out of the way!).
- Insect removal from external auditory canal
    - Step 1: Kill the insect
        - Don't try to do this with water (drowning an insect doesn't work).
        - Options include lidocaine and mineral oil. Lidocaine may be the superior option because it also anesthetizes the ear.
    - Step 2: Insect removal
        - Can use a Fraser suction catheter or small forceps to remove.
        - Flush with normal saline or water to remove all pieces.
    - Typically, prophylactic antibiotics are not necessary unless you can see a significant injury to the canal.

References:

https://www.procedurettes.com/

CorePendium: Ear Foreign Bodies

Cardiology Corner: LBBB + MI

Brittany Guest and Amal Mattu

- Diagnosing occlusive myocardial infarction (MI) in left bundle branch block (LBBB) and paced rhythms can be difficult.
- The Sgarbossa criteria were first described in 1996.
- These were the "original" Sgarbossa criteria and there were 3 criteria. It turned out that the first 2 were really good but the third was not as good.
    - (1) In any lead when you have at least 1 mm of concordant ST elevation, you are done (enormously predictable). If the QRS primarily points up and the ST is in the same direction, that equates to occlusion.