



## Major Trauma M&M - Learning Points June 2015

### **This isn't rocket science but: abdominal CT *supplements* clinical examination**

The abdominal component of a trauma CT is relatively limited in comparison with a 'normal' abdominal CT in that oral contrast isn't given. Subtle findings, such as small amounts of free fluid may mask much more significant pathology. Serial examination of the abdomen is required together with consideration of repeated imaging.

Example: a patient with small amounts of free fluid had ischaemic bowel as a result of a mesenteric injury. Resection with primary anastomosis was required (but not as a result of any delay in diagnosis).

### **CT and clinical examination part two**

The interaction between the trauma team and the radiologist is a collaborative one. The better the clinical information the clinical team provides, the greater will be the accuracy of reporting. If clinical information comes to life after the scan then this too should be fed back to the radiologist.

Example: a patient involved in an RTC was not log rolled. The spinal fracture was not immediately identified on CT. Had the radiologist been informed of (likely) spinal tenderness on log roll (pre or post CT) then the fracture might well have been identified earlier.

### **Blood products always take longer to get than you would think**

A recent case required activation of the massive transfusion protocol. The clinical team felt that blood products took quite some time to arrive. In fact the lab were able to show that type-specific and then fully cross matched blood had been provided in a timely fashion - type specific within 13 minutes of receiving the x-match and FFP within 31 minutes. In fact it took 13 minutes from release of O-ve to receipt of x-match sample in the lab.



Getting a correctly labelled sample to the lab must be a priority for the trauma team. It is best to allocate one person to liaise with transfusion and use a clinical team member to hand deliver the x-match sample ensuring that the lab check it is correctly labelled.

In the near future we will look at introducing a 'code red' trauma call and consider whether there is a role for using pre-thawed AB FFP (universal donor FFP).

### **Undertriage anchoring**

*"Anchoring is a cognitive bias that describes the common human tendency to rely too heavily on the first piece of information offered (the "anchor") when making decisions. During decision making, anchoring occurs when individuals use an initial piece of information to make subsequent judgments. Once an anchor is set, other judgments are made by adjusting away from that anchor, and there is a bias toward interpreting other information around the anchor." (Harvard Law School)*

The scenario: high speed RTC. Occupants mobilising at scene and seem 'OK'. Paramedics don't perceive as 'major trauma'....ED nursing team then don't triage as 'major trauma'....ED junior doctor sees several hours down the line....alerts ED senior doctor....who reviews patient but with a completely different 'mindset' to a trauma called patient.

The result: missed and delayed diagnoses impacting on patient care.

Advice: don't get anchored.

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