



Major Trauma M&M - Learning Points Oct 2015

If someone is bleeding....

There have been a number of cases recently where bleeding people have been given significant volumes (up to 3 - 4 litres) of crystalloid (and even some colloid) prior to blood transfusion. This shouldn't happen. If you are thinking about giving more than one litre of non-blood product (including pre-hospital fluid) think carefully about why you are doing it. In trauma the likeliest cause of hypotension is blood loss, particularly once you've excluded tension physiology and neurogenic shock. And remember TXA - we generally do, but there have been a few cases recently where it has been delayed.

O negative blood

The blood fridge in resus does **not** contain O -ve blood. When it did we found that wastage was significant. If the pre-alert information suggests the patient may be haemodynamically unstable then contact blood bank and get some O -ve sent up. This has the added advantage of ensuring blood bank are aware of a potential massive transfusion activation. When sending a x-match sample to the lab have a member of the team deliver it by hand, and get the transfusion team to **check it is correctly labelled** - this will prevent any later delays.

To CT or not CT?

The use of CT in trauma is tricky. On the one hand we know that the use of polytrauma (head to pelvis) CT is associated with improved outcomes, on the other we know that CT increases an individual's risk of cancer over the next 10 years (with perhaps 1 extra cancer / 1000 or so individuals scanned).

Clearly a variety of factors needs to be taken into account: mechanism, physiology, distracting injuries etc but there are no absolute indications (or indeed contra-indications) for scanning - the decision needs to be made by the senior clinicians **directly assessing** the patient in discussion with the radiologist.

This is particularly important in children - you can read the WYMTN guidance on www.wymtn.com . It relies heavily on the Royal College of Radiologists guidance published in 2014.

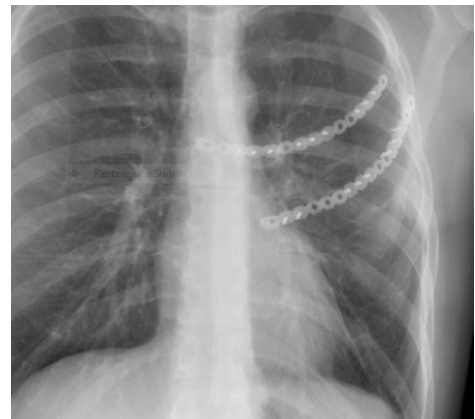
Bear in mind however that no guidance can replace good clinical assessment. A recent case involving a child is a good example: CT revealed an aortic injury that was not evident on CXR.



Conversely, CT will miss stuff - either because it simply isn't visible (such as a patient with a pericardial tear identified during a thoracotomy for rib fixation) or because (very occasionally) it was over-looked on initial reporting.

Rib fixation

The thoracic surgical team are always keen to hear about any patients who may benefit from rib fixation. Bear in mind that if the patient's condition changes after the initial discussion you should get back in touch with them again ie if a patient who was considered 'too well' deteriorates - then let them know.



Stairs & older people

We continue to see significant injuries resulting from older, frailer people falling downstairs. These *may* be obvious serious head injuries - in which case things are (unfortunately) fairly straightforward. But we also tend to underestimate the significance of a constellation of small injuries on this population - a number of relatively minor injuries can have a significant & indeed life-threatening impact on this group. From an ED perspective have a low threshold for activating the trauma team & from a hospital perspective always consider what level of care they will need, particularly with rib injuries - this group often get worse before they get better.



Pelvic Splintage

A recent pelvic fracture led to discussion around the use of pelvic splints. The patient with the fracture shown didn't have a splint on - perhaps because of concern that it would not help in this fracture pattern. The general consensus is that even for non open book pelvic fractures there is potential benefit to splintage. Putting the splint under the knees and sliding upwards will help limit movement.



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Finally - transfer to interventional radiology

We are lucky to have a fantastic interventional radiology service within LTHT but we sometimes fail to get patients in to IR as quickly as we would like. A standard operating procedure was written some years ago to try and speed this process as best as possible. It can be found here <http://www.lhp.leedsth.nhs.uk/WYMTN/Docs/30.pdf>

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