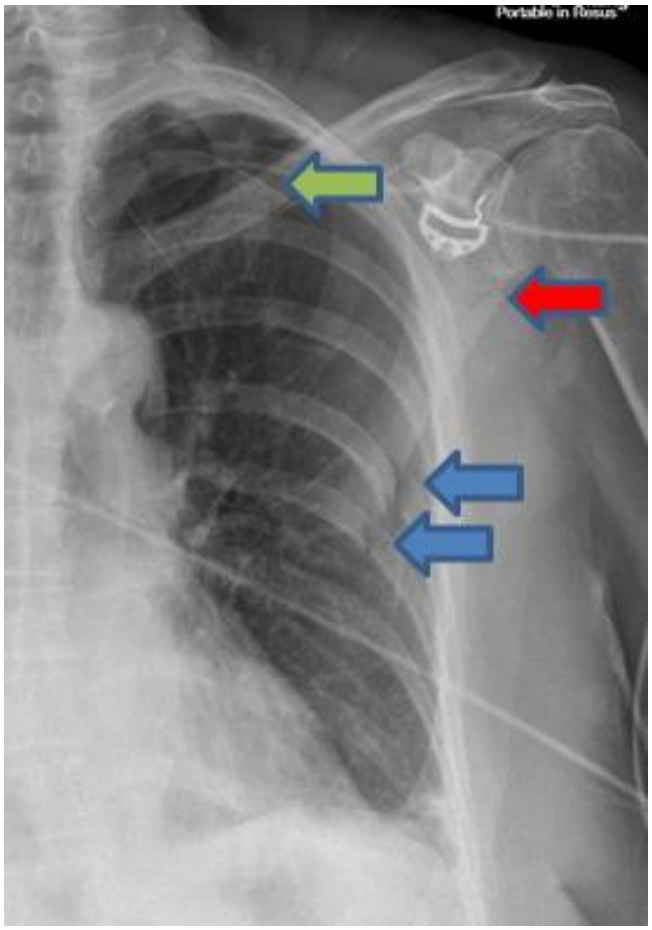
West Yorkshire Major Trauma Network
Learning from Incidents

January 2020

WYMTN collates incidents from across the network and feeds back to clinicians and organisations when necessary. Themes emerge. This document summarises these with some anonymised examples.

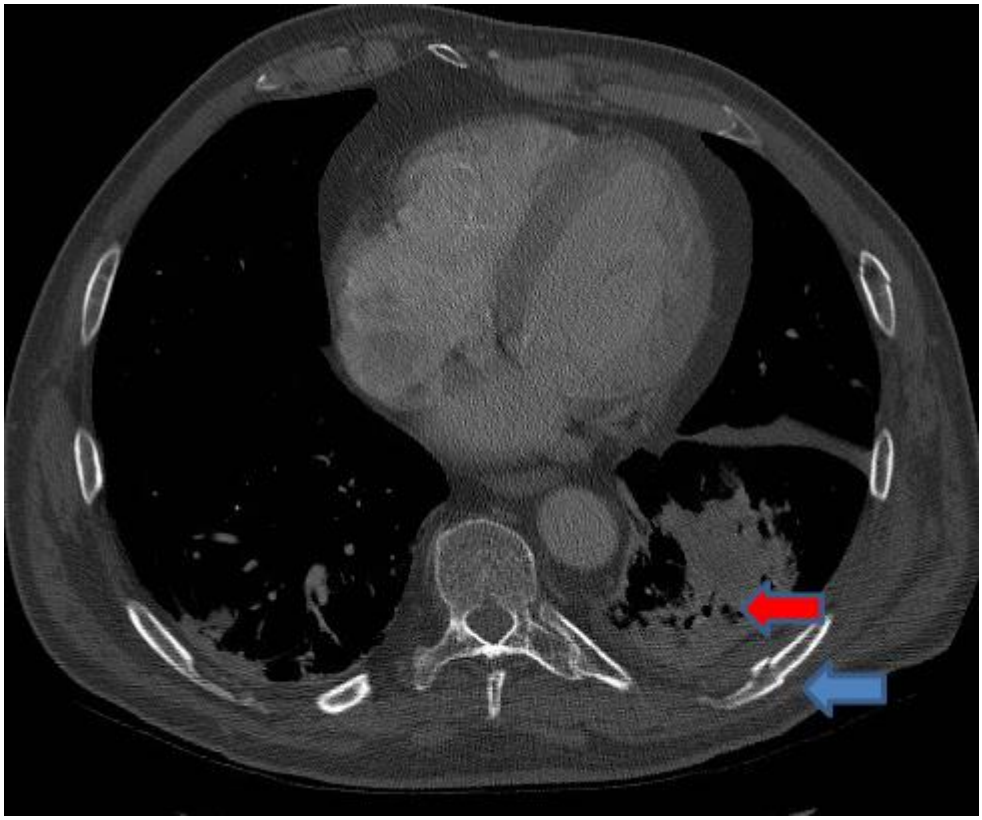
Unrecognised chest injuries

The extent of chest injuries is often unrecognised at the scene leading to the patient being taken to a Trauma Unit rather than the MTC. This is especially so in older patients. A man in his 70s fell over his bannister and landed on a piece of furniture. He couldn't lie flat because of the pain he was in but his observations were fairly unremarkable. X-ray demonstrated a number of rib fractures (blue arrows), a scapular fracture (red) and a pneumothorax (green). He was managed with an intercostal drain and appropriate analgesia (see https://www.wymtn.com/chest-trauma.html for network guidance on the management of chest trauma.



Once a patient reaches hospital the extent of their injuries can be missed too, especially if they haven't been pre-alerted. A man in his late 60s, on warfarin for AF, fell 7 ft from a

ladder. His O2 sats were initially 91% but improved with nasal cannulae. He wasn't pre-alerted and wasn't flagged up at triage. He eventually had a trauma CT which demonstrated mutiple rib fractures (blue arrow), a small haemothorax with pulmonary contusion (red arrow) and pelvic fractures. His warfarin was reversed and he was managed by the major trauma team, with a good outcome.



It's not just older people though. A man in his 20s presented to a trauma unit after a fall from a ladder. A chest x-ray was OK and he was discharged but re-presented to another TU with on-going pain a couple of days later. CT demonstrated 3 lower right rib fractures and a liver laceration. He was transferred to the MTC and recovered well with conservative management.

On occasion the crew at the scene recognise that the mechanism of injury has been pretty significant but, because of unremarkable physiology, are advised not to transport to the MTC. One such case involved a fall from this bridge. The crew on scene had concerns for a chest injury (and were proved right) but were advised to attend the nearest TU.

Bear in mind however that not all chest injuries need MTC management. Uncomplicated rib injuries and pneumothoraces can be happily managed in a Trauma Unit.

Learning points:

- Older people suffer significant chest injuries with relatively low energy mechanisms of injury.
- Plain film radiography can easily miss significant injuries to the chest wall.
- Don't be lulled into a false sense of security by a lack of pre-alert - both when triaging a patient and when first examining them.
- Use the Major Trauma Triage Tool https://www.wymtn.com/yorkshire-major-trauma-triage-tool.html
- Recognise that if the people on scene are worried, there may well be a very good reason for this.