

## West Yorkshire Major Trauma Network - Learning from incidents June 2015

Below are some key learning points from incidents that have been reported over the last year. Feedback is clearly critical to anybody's learning - and this applies to the trauma network too. If you witness what you believe to be sub-standard care please don't ignore it. In the first instance escalate through your local system, using formal incident reporting where necessary. Similarly - if you've got ideas on how to improve the system don't keep them to yourself!

Probably the most common cause of disagreement within the network relates to the transfer of patients from Trauma Unit to Major Trauma Centre. We'll be sending out some more information to try and clarify this area soon. In the meantime, please read on for some case based learning.

### **Avoid slow decision making**

A woman was knocked off her bike. She sustained a femoral fracture with vascular compromise to the limb. She didn't meet the triage tool criteria and so was taken to the nearest Trauma Unit. The ischaemic limb was recognised but not improved by splintage. There was then some discussion between local specialties followed by transfer to the MTC. Vascularity was restored at the MTC some 6 hours from initial injury and fasciotomies performed. She went on to make a good recovery.

**Learning point:** if a TU can't provide necessary urgent interventions then the patient should be transferred to the MTC as swiftly as possible ('send & call'). In this case local decision making delayed definitive care.

### **Reduced GCS isn't always direct brain injury**

A young man was hit by a lorry. He was unconscious at the scene (GCS 3) and needed airway manoeuvres. The paramedics suspected head, chest and abdominal injuries and transferred him to the MTC. On arrival at the MTC his GCS was 14 (nearly normal) but then dropped again. The assumption was that he had an expanding extradural haematoma but in fact CT showed no head injury but significant ongoing intra-abdominal bleeding. His GCS had probably dropped again because of under-perfusion of the brain.

**Learning point:** don't assume a change in conscious level is due to a head injury - hypotension will lead to a reduction in conscious level too.

### **Don't lower your guard**

A young woman came off her horse. She complained of upper back pain and tingling numbness in her hands. She was correctly brought to the MTC but without a pre-alert. On

this occasion the MTC triage nurse recognised the potential significance of her injuries and a trauma call was put out. The patient had an unstable spinal fracture and went on to have surgery and make a good recovery.

A young woman was involved in a high speed RTC. She ran away from the incident and was found by the police. Because she had mobilised & was intoxicated her potential for serious injury was not really appreciated at initial pre and in hospital assessment. She was reviewed by a senior clinician after some hours in the (MTC) ED. Trauma CT revealed intra-abdominal injuries that needed surgical intervention. She had a good outcome.

**Learning point:** Patients present in a variety of ways. With children many are brought directly by their family. Just because the first person to see the patient didn't think there was a major trauma doesn't mean you shouldn't keep an open mind. Avoid blindly accepting their assessment. *"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)

### **Open fractures - an indication for bypass?**

Open fractures aren't in and of themselves a reason to bypass to the Major Trauma Centre. The triage tool states "Traumatic amputation proximal to wrist/ankle" as an indication for bypass and the supporting document reinforces this with "Crushed, de-gloved or mangled limb". So, an open fracture won't on its own need bypass: many can be managed in a trauma unit. Sustaining such an injury though does require significant force, and so is an indicator that there may be other significant injuries present too. If the TU team feel that a particular open fracture requires management at the MTC the patient should first be admitted to the TU orthopaedic wards (with appropriate first aid measures including antibiotics) and be transferred as a secondary transfer in most cases. Clearly if there is an immediately limb threatening problem that can't be managed at the TU the patient should be transferred as an emergency from TU ED to MTC ED.

### **Ankylosing spondylitis**

It is well recognised, but regularly forgotten, that people with ankylosing spondylitis have spines that break easily. Any spinal pain in someone with AS should be taken seriously, and imaged appropriately. You can read more about it here:

<http://radiopaedia.org/articles/ankylosing-spondylitis>

For more information, or if you want to share your ideas, contact:

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*All the cases described are based on real patients but fully anonymised*