West Yorkshire
Major Trauma Network

West Yorkshire Major Trauma Network - Learning from incidents
April 2016

Delayed paediatric trauma care

This "learning from incidents" is a fictionalised case based on real events. The case highlighted a number of areas where the care delivered could have been better but happily the outcome was good.

A child was brought to a Trauma Unit Emergency Department after sustaining abdominal injuries in an assault. The significance of the mechanism of injury was not appreciated at triage and the child waited a few hours to be seen.

Issue
We know that over 25% of children with severe injuries are brought to the ED by family and friends rather than by ambulance. We also know that more than 50% of children with severe injuries present to a Trauma Unit[i].

TU staff need to be very aware of the possibility of significant injury in children who are brought to their ED

The child was seen by a nurse practitioner, who identified significant abdominal tenderness and a head injury and quickly involved the ED consultant. Following their review a chest x-ray was performed followed by an abdominal and head CT.

Good practice
The nurse practitioner recognised the possibility of a serious injury and acted promptly to involve a senior colleague. Imaging was carried out in line with the network guidance for imaging in children[ii]**.**

The CT scan revealed free intra-abdominal air, suggesting a perforation. The local general surgical team were involved and contacted the paediatric surgical registrar on call at the MTC. The referral was a little unclear and lacking in detail and the paeds surgical registrar didn't feel they had enough information to make a decision about the patient. The MTC Paeds Surgical team also reported that they had no HDU beds currently and requested completion of the full trauma CT. The local team organised review by an anaesthetist with a view to transfer, and awaited further contact from the MTC whilst organising chest and c-spine CT.

Issue
The lack of clarity of the referral led to delays in decision making.

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When making a referral use an 'SBAR' type format to ensure you deliver a clear message, giving structured clinical information and making it very clear what you are expecting from the recipient of the referral.
(see appendix 1)

Issue
The child received further scans that weren't really clinically indicated. They did not identify any further images.

Follow the network guidance. There are situations where a full trauma CT is required in a child (eg multiple injuries in an RTC in an obtunded patient) but this wasn't one of them.

Issue
The child wasn't accepted for immediate ED to ED transfer.

If a patient in the ED of a Trauma Unit requires transfer to the MTC the transfer should not be delayed because of concerns about critical care capacity at the MTC. Transfer to the MTC ED should be organised. Guidance can be found on the network website[iii]

Some hours later the anaesthetic consultant from the TU contacted the Paeds Surgical SpR again. They'd been tied up with a number of things and hadn't been able to progress the plans. Happily the child remained stable. Eventually an MTC bed was identified and the child was transferred. They underwent a laparotomy early the next day and made a full recovery.

Issue
There was a lack of early escalation to involve senior clinicians.

Teams should not hesitate to escalate problems. Consultant to consultant discussion will usually result in a rapid solution. An alternate resource that could have been used here is Embrace who, in a non-time critical situation, can facilitate a teleconference and provide advice and support for transfer[iv].

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APPENDIX ONE - SBAR

"[situation] Hello I'm the General Surgical SpR at TU X. I'm calling about a 12 year old with a suspected small bowel perforation following blunt trauma.

The background is that they were assaulted and have an isolated abdominal injury.

[assessment] They are stable with a heart rate of 92, blood pressure of 110/70, respiratory rate of 18, sats of 99% on air and GCS 15. CT of the abdomen has shown free gas but no clear focus. There is no obvious active bleeding. CT of the head and chest x-ray were normal, their c-spine has been cleared clinically. Bloods are awaited but a VBG was unremarkable with a lactate of 1.9.

[recommendation] We think they need a laparotomy and would like you to accept them for transfer for further management."

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[i] https://www.tarn.ac.uk/Content/ChildrensReport2/index.html#16
[ii] http://www.wymtn.com/imaging-in-children.html
[iii] http://www.wymtn.com/inter-hospital-transfer-pathway1.html
[iv] http://www.wymtn.com/paediatric-transfers.html

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