

West Yorkshire Major Trauma Network - Learning from incidents Sep 2016

Missed diagnosis

This “learning from incidents” is a fictionalised case based on real events.

An adult patient fell from a ladder and landed heavily on their left side. They were seen and assessed by the trauma team and a Trauma CT was requested. The scan was not thought to show any significant injury although the spleen was noted to have an area with a slightly abnormal appearance but no evidence of capsular haematoma or bleeding.

The patient was tender in the left upper quadrant but otherwise OK, with no haemodynamic instability. They were put on the observation ward for a number of hours and discharged following clinical re-assessment as they appeared well.

Some days later they developed increased pain in the abdomen and became unwell. Repeat imaging demonstrated rupture of the spleen. They had a splenectomy and made a good recovery.

Issue

Like all tests the trauma CT has a false negative and false positive rate. In this case, with the benefit of hindsight, the abnormality (which was felt to be an artefact caused by heterogenous contrast uptake), is likely to represent an area of contained splenic injury.

The patient had clinical signs compatible with a splenic injury but the clinicians were falsely reassured by the normal report.

Good practice

The patient had prompt appropriate imaging following an immediate assessment and was reviewed on a number of occasions by clinicians, including prior to discharge.

If a result is equivocal and the patient has symptoms that suggest an injury then the result should be queried and consideration given to repeat imaging.

In this case the patient could have been reviewed by a more senior clinician or specialist and the imaging discussed with a radiology consultant. This would probably have led to admission for observation and possible repeat scanning. The likely outcome would still have been that the patient would have been discharged after a few days but fully informed as to the possibility of delayed problems and advised to avoid strenuous activity that might cause delayed rupture. With regard to discharge advice the Trauma Networks guidance states:

“Patient advice regarding return to normal activity and return to contact sports

Advice regarding mobility must also take into account any musculoskeletal injuries:

There is little data to guide return of activity and the following is probably a conservative recommendation based on injury grade (see Appendix 1 - 3). However, with regard to solid organ injury (spleen, liver, kidney) recommend:

- Rest at home = 1 week per grade of injury
- Avoid contact sports (including horse riding) = 1 month per grade of injury

For example, a patient with a grade III splenic laceration should be advised to:

- Rest at home for 3 weeks (specifically not to be advised to stay in bed, normal gentle activities of daily living should be fine, do not do anything that gets them out of breath)
- No contact sport for 3 months.”

For more details see:

http://www.wymtn.com/uploads/5/1/8/9/51899421/wymtn_abdominal_trauma_may2016.pdf

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