

Queensland
Trauma Education

ABDOMINAL TRAUMA

Blunt abdominal trauma imaging

Case discussion

Participant resource kit

CSDS



Clinical Skills Development Service



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Queensland Trauma Education**Abdominal Trauma - Blunt abdominal trauma imaging: Case discussion - Participant resource kit
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Queensland Trauma Education

The resources developed for Queensland Trauma Education are designed for use in any Queensland Health facility that cares for patients who have been injured as a result of trauma. Each resource can be modified by the facilitator and scaled to the learners needs as well as the environment in which the education is being delivered, from tertiary to rural and remote facilities.

National Safety and Quality Health Service (NSQHS) Standards



About this training resource kit

This resource kit provides healthcare workers with an understanding of the role of imaging and interventional techniques utilised in the management of blunt abdominal trauma.

Learning objectives

By the end of this session the participant will be able to:

- Understand the benefits and limitations of imaging techniques in blunt abdominal trauma.
- Understand the grading of injury utilising the AAST guidelines.
- Discuss the role of interventional radiology in splenic trauma and ongoing care of the patient post embolization.

Overview of blunt abdominal trauma

Blunt abdominal injury often occurs as a result of road traffic crashes and falls. It is a common body region injured with up to 22% of traumatic injury following trauma. Blunt abdominal injury can often be challenging to diagnose with significant injury present without external signs of trauma.¹ A direct blow to the abdomen can cause solid organ rupture, visceral damage and haemorrhage, contamination from peritoneal contents and peritonitis. The spleen, liver and small bowel are commonly injured following blunt trauma.

Significant injury should be suspected with the presence of a seatbelt injury, peritonitis- with rebound tenderness or guarding, hypotension (SBP <90mmHg) and other associated trauma.²

Further reading

Coccolini, F., Montori, G., Catena, F., Kluger, Y., Biffl, W., Moore, E. E., Reva, V., Bing, C., Bala, M., Fugazzola, P., Bahouth, H., Marzi, I., Velmahos, G., Ivatury, R., Soreide, K., Horer, T., Ten Broek, R., Pereira, B. M., Fraga, G. P., Inaba, K., ... Ansaloni, L. (2017). Splenic trauma: WSES classification and guidelines for adult and pediatric patients. *World journal of emergency surgery : WJES*, 12, 40.

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Case discussion

Case study

A 20 year old male patient involved in a single vehicle, high-speed RTC rollover. The patient was ejected from the vehicle. He was haemodynamically unstable initially – HR 120 and BP 80/60. On scene, he was intubated following RSI and had a L decompressive finger thoracostomy by pre-hospital team before transport to ED.

On arrival to ED, the patient is intubated and ventilated and remains haemodynamically unstable: HR 105, BP 100/65, SpO2 97% FiO2 1.0. The patient is moved to the resuscitation bay.

References

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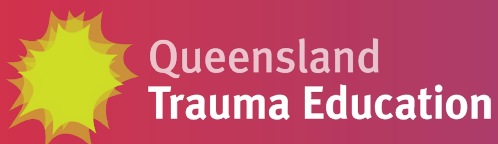
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