



Clinical Practice Guidelines: Trauma/Abdominal trauma

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Purpose	To ensure a consistent approach to the management of patients with abdominal trauma.
Scope	Applies to Queensland Ambulance Service (QAS) clinical staff.
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Population	Applies to all ages unless stated otherwise.
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Abdominal trauma

October, 2015

Penetrating and blunt trauma to the abdomen can produce significant and life-threatening injuries. Many serious abdominal injuries may appear insignificant, making it extremely difficult to predict severity. The close proximity of organs within the torso makes distinguishing between abdomen, chest and pelvic injuries difficult. Associated injuries outside that cavity should be considered in all patients.^[1]

Blunt abdominal trauma

Blunt trauma results in compression and shearing force injuries. Compression forces are those that result in abdominal organs and blood vessels being crushed between solid objects. Shearing forces cause tearing and rupture of solid organs and blood vessels at multiple sites.

Penetrating trauma

The extent of vessel and organ damage, including haemorrhage, due to penetrating trauma is dependent on the mechanism (e.g. stab wound vs gunshot wound). Many of these patients will require formal surgical exploration and repair. Small entry wounds may mask significant internal injury.^[2] Regardless of the mechanism, catastrophic deterioration can develop quickly and unexpectedly. All penetrating injuries despite the assessed level of penetration, or actual size of the wound, should be treated as serious and potentially life threatening.

Children

Due to their physique, children are particularly susceptible to abdominal trauma. In comparison to adults, their relatively large abdomen is poorly protected by lower ribs and pelvis and children may present with few external signs of trauma.^[3]

Clinical features



Features may be obvious but in some presentations unexplained shock may be the only sign of severe abdominal trauma.^[2] Signs and symptoms include:

- ALOC
- Dyspnoea
- Abdominal pain/discomfort, guarding and tenderness on palpation
- Hypovolaemic shock
- Abdominal bruising (e.g. Cullen's sign, Grey Turner sign) and distension can be a late sign and difficult to determine.
- Shoulder tip pain (Kehr's sign)

Complications



- Significant abdominal injuries may present with little external evidence of trauma or a trivial pattern of injury and or mechanism.^[1]
- Fluid resuscitation. Use minimal fluid therapy to achieve a systolic BP 90 mmHg or perfusion of vital organs.^[4]
- Refer to specific CPG for abdominal trauma in head-injured or pregnant patients.

Additional information

- Pattern bruising such as Cullen’s and Grey Turner’s sign may take hours or days to develop.
- Trauma that presents with eviscerated bowel should be covered with moist sterile pads or cling wrap.
- Focused assessment with sonography in trauma (FAST) assists responders to identify internal complications present in the trauma patient.

IMPORTANT:
Pregnant patient:
 Manage as per CPG:
 Trauma in pregnancy.

Note: Clinicians are only to perform procedures for which they have received specific training and authorisation by the QAS.

