

Emergency Department Management of Open Tibia / Fibular Fractures

Patients presenting with suspected open lower limb fractures should be rapidly assessed. Open lower limb fractures are often associated with high energy impact and may have associated vascular compromise or evidence of compartment syndrome

Multiply injured patients should undergo assessment and treatment within the resuscitation room for life or limb threatening injuries as part of the major trauma primary survey by the trauma team as appropriate

The following actions should be completed for each case (please tick / comment)

Action	Yes	No	Comment
In Major Trauma ; Airway with C-Spine protection, Breathing and Circulation with haemorrhage control prioritised according to ATLS® principles – use the <i>major trauma proforma</i>			
Effective titrated analgesia			
Neuro-vascular examination of the limb			
Reduction and splintage under appropriate analgesia or conscious sedation is required to help control blood loss, reduce pain and prevent further soft tissue injury			
Repeat neurovascular examination after application of splint and record this in the notes			
Remove easily accessible gross contamination from the wound			
Photograph wound (Departmental camera with patient's consent)			
Cover wound with sterile saline soaked dressing			
Intravenous antibiotics as soon as possible (See Trust Guidance)			
Check tetanus status and administer prophylaxis if required			
HATI is required for proven open fractures (separate site to prophylaxis)			
X-Ray all suspected open fractures. Two views including the knee and ankle for tib/fib injuries			
Ensure "check X-Ray" performed for all POP applications			
Keep patient NBM for possible urgent intervention in theatre (ensure blood glucose checked in diabetic patients)			
Immediately discuss with Orthopaedic SpR at the LGI. If not for LGI, refer to the orthopaedic team at PGH. Note: If there is clearly going to be a long wait for orthopaedics bed at LGI once accepted then refer for warding under local orthopaedics until delayed transfer can take place			

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Continued re-evaluation of the patient is necessary to identify neurovascular compromise and compartment syndrome