Open Fracture Pathway

NHS
South West London & Surrey
TRAUMA NETWORK

The content of this pathway reflects the latest version of NICE guidance NG37 (2016) and BOAST 4 (2017). The following is not an exhaustive description of the management of an open fracture but rather identifies the key points along the patient pathway that need to be recognised.

Inclusions:

- ALL open long bone fractures, plus those of the hindfoot and midfoot and pelvis
- This applies to both adults and children.

Exclusions:

- Hand and wrist; Forefoot; Facial fractures

Destination:

- All relevant open fractures should be transferred to St George's (MTC / Orthoplastic centre)

Soft tissue injuries / degloving / crush injuries:

Any injury that involves significant trauma to the soft tissues should be managed along similar lines to the BOAST and NICE standards. Early discussion with the ortho-plastics service at St George's is recommended. Crush injuries can evolve over several hours and may require extensive debridement and reconstruction; Degloving injuries may not always be associated with fractures; Complex mid- and hindfoot fractures associated with soft tissue injuries have a high complication rate. All of these warrant urgent discussion with the MT

Antibiotics:

- All patients should receive antibiotics within 1 hour of injury
- Augmentin 1.2g IV is the usual choice if no allergies. Follow BOAST / local guidelines
- Tetanus prophylaxis should be considered.

ED management / Initial management:

- Do not perform mini washouts in the ED
- Saline soaked gauze should be used for dressing
- Antibiotics should be given urgently if not already done so.
- Limbs should be realigned and splinted and neurovascular status documented
- Compartment syndrome may need to be managed with emergency decompression locally as per BOAST guidelines.

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Transfers:

- If at TU – arrange ED to ED transfer rather than admitting to orthopaedic ward to await transfer
- Any open fracture received at a TU must have local orthopaedic input prior to transfer
- If transferring ED to ED, the local orthopaedic team should phone the receiving on call at St. Georges' (consultant to consultant ideally)

Surgery:

- Initial debridement should be a combined consultant-delivered orthopaedic and plastic surgery procedure
- Debridement within 12 hours of injury for IIIa/IIIb and 24 hours for all others
- Definitive cover / closure should be within 72 hours
- Definitive internal hardware only performed at same time as closure or coverage.

Elderly open ankle / lower limb fractures:

- Ideally transferred urgently as above
- Do not excise skin edges
- Do not apply VAC
- Primary fixation and closure is the ideal wherever appropriate.

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