Open fractures & the soft-tissue envelope

Coordinate skeletal and soft-tissue care from the start.

INJURY PRIORITIES / ADULT TRAUMA

Treat an open fracture as a contaminated bone and soft-tissue injury requiring an orthoplastic plan.

01 Act early

Give intravenous prophylactic antibiotics promptly, ideally within one hour of injury, using the local regimen. Check tetanus status. Document neurological and vascular findings before and after realignment and splinting.

02 Protect the wound

Remove only gross contamination before formal debridement. Photograph the wound appropriately, then cover with saline-soaked gauze and an occlusive dressing. Avoid repeated opening and emergency-department mini-washouts.

03 Set the urgency

Immediate debridement is indicated for highly contaminated wounds or vascular compromise. Other high-energy injuries require urgent debridement; use the specialist network's timing pathway and the patient's overall condition.

04 Plan definitive coverage

Agree fixation and coverage together. BOASt targets definitive closure or coverage within 72 hours if not achieved at debridement; internal fixation should be coordinated with immediate definitive soft-tissue cover.

WATCH POINT A small skin wound may conceal extensive deeper injury. The wound size alone does not determine severity.

DISCUSS WITH THE TEAM

Are the fixation and soft-tissue teams working toward one shared definitive plan?

READ THE SOURCES

[1] BOASt: Open Fractures (December 2017), standards 1-5 and 8-15.