

Combat Casualty Care

AMPUTATION

Evaluation & Treatment

EVALUATE

- Inspect thoroughly
- Extend wounds longitudinally as needed to examine all tissue levels
- Use Doppler/arteriography to evaluate perfusion of injured extremity.

TREAT

- Control bleeding & gross contamination
- Debride non-viable tissue
- Irrigate with normal saline
- Double ligate vascular structures- separate from nerves
- Ensure hemostasis
- Avoid traction neurectomies - Possible targeted muscle reinnervation

DECISION TO AMPUTATE

- Life over limb
- Amputation can potentially be deferred if:
 - There is adequate limb perfusion
 - Perfusion can be restored quickly with primary repair or shunt
 - Amputation can be deferred for volumetric loss, nerve injury, w/intact limb perfusion



GOALS

Preserve limb length
 Preserve perfusion
 Facilitate wound closure
 Eventual wound closure or coverage

MECHANISM OF INJURY

Blast ▪ GSW ▪ Crush

COMORBIDITIES

Blood loss
 Massive resuscitation
 Burns
 Compartment syndrome
 Contamination load

AMPUTATE

- Most distal level possible
- Accept atypical skin flaps if viable
- No primary closure
 - Serial I & D (24-48 hours)
- No guillotine amputations
- Stabilize proximal fractures

POST OP CARE

- Soft dry dressing
- Splint/bivalve cast
- Skin traction for short skin flap
- Avoid pillows under knee
- Negative-pressure wound therapy
 - Clean/healthy/hemostatic wounds
 - Neurovascular structures covered
 - Antibiotic beads

EVACUATE

- Stabilize ortho injuries
- DVT prophylaxis
- Supplemental O2
- Prevent hypothermia
- Pain management
- NPWT remain covered
- Coordinate dressing/debridement with schedule



- ✓ Amputation wound not closed primarily
- ✓ Avoid guillotine amputations
- ✓ Repeat debridement/dressing change within: 24hrs (extensive wound), 48hrs (non-extensive wound)



This information is pulled from the evidence-based Joint Trauma System (JTS) Amputation: Evaluation & Treatment Clinical Practice Guideline (CPG). JTS CPGs can be found at the [JTS CPG website](#) or the [JTS Deployed Medicine site](#).