

Zuckerberg San Francisco General Hospital Open Fracture Antibiotic Protocol

Gustilo-Anderson Type I and II Fractures

Preferred: Cefazolin 2 g (3 g if > 120 kg) IV q8h¹

Severe beta-lactam allergy: Clindamycin 900 mg IV q8h

Gustilo-Anderson Type III Fractures

Preferred: Ceftriaxone 2g IV q24h

Severe Beta-lactam allergy: Clindamycin 900 mg IV q8h + levofloxacin 500 mg IV q24h¹

Exceptional Cases

- Soil or Fecal Contamination: Vancomycin 15mg/kg IV q8-24h² + Ertapenem 1g IV q24h¹
- Standing Water Contamination: Piperacillin/ tazobactam (Zosyn) 4.5g IV q6h^{1,3}
- Known MRSA colonization: Add vancomycin 15 mg/kg IV q8-24h²

Antibiotic Timing: Start ASAP, continue 24 hours after index debridement

¹May require dose adjustment for renal impairment

²Vancomycin dose frequency based on creatinine clearance: Q8h if CrCl > 90, Q12h if CrCl 30-90, and Q24h if < 30; may require further dose adjustment based on trough levels if continued beyond 3 days

³Restricted antibiotic, requires ID approval

Gustilo Anderson Classification (most accurately graded during intraoperative examination):

Type I: wound ≤1 cm, minimal contamination or muscle damage

Type II: wound 1-10 cm, moderate soft tissue injury

Type IIIA: wound >10 cm, extensive soft-tissue damage, contaminated, adequate tissue for flap coverage

Type IIIB: extensive periosteal stripping, wound requires soft tissue coverage (rotational or free flap)

Type IIIC: vascular injury requiring vascular repair, regardless of degree of soft tissue injury

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