The Initial Management of Open Fractures

JOE WILKINSON, MD, FACS
Open fracture classification

- Gustilo/Anderson classification
  - Grade I—Pinhole
  - Grade II—1-2 cm or less
  - Grade III—Greater than 2 cm
Infection risk

- I—0-2% 1.4% ave
- II—2-10% 3.6% ave
- III—10-50% 22.7% ave
Why does it matter?

The Devastating Effects of Tibial Nonunion on Health-Related Quality of Life

Mark R. Brinker, MD, Bryan D. Hanus, MD, Milan Sen, MD, and Daniel P. O’Connor, PhD

Investigation performed at Fondren Orthopedic Group, Texas Orthopedic Hospital, Houston, Texas
Principles of Acute Management

- Assessment of the patient
- Classification of the injury
- Antibiotic therapy
- Debridement and wound management
- Fracture stabilization
What is really important in initial management?

- Wound debridement
- Antibiotic administration
Initial wound care in the field

- Splinting
- Moist wound dressings
- Transport
Wound debridement

- Timing
- Thorough and methodical
Antibiotics

- Timing - 3 hours
- Repetition
Special circumstances

- Gas gangrene-*Clostridial myonecrosis*
- Gunshot wounds-Grade III injuries
- Injection injuries
Thank you