Specific wound healing complications

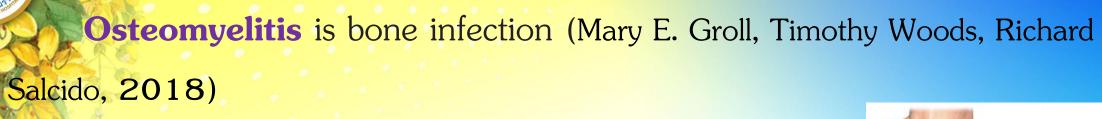
assessment and interventions: Osteomyelitis

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Definition

osteo (meaning bone) and *myelo* (relating to myeloid bone marrow)



*ADAM

Osteomyelitis of the lower extremity (ankle, heel, forefoot, and metatarsals) is a common challenge for patients with diabetes that risk for foot amputation.

Pathogen : most common is Staphylococcus aureus





Sub-acute OM infection develops within 1–2 months of onset of signs and symptoms

Chronic OM (COM) infection starts at least 2 months after an

injury, initial infection.





Risk factors

- A weakened immune system : CA, malnutrition, dialysis
- diabetic foot infections, peripheral arterial disease
- A deep puncture wound or Open fracture
- Surgery to replace or repair bones
- Surgical sites, and penetrating wounds









Signs and symptoms

They commonly include:

- Severe pain, swelling, redness, and tenderness in the affected area
- . Irritability, lethargy, or fatigue
- . Fever, chills, and sweating

Drainage from an open wound

The symptoms of chronic osteomyelitis are not always not obvious





Diagnosis

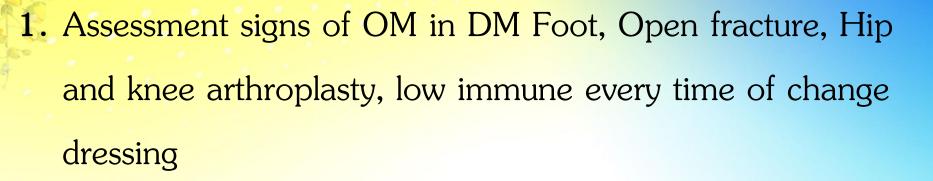
- Sign and Symptoms
- ulcer that measures more than 2 cm2.
- a positive probe-to-bone test (Exposed bone in the wound bed)
- An ESR greater than 70 mm/h
- Plain films show reactive bone formation and periosteal elevation
- Bone biopsy confirms osteomyelitis and identifies the specific

pathogen









Prevention

- 2. Appropriate wound dressing especially infective wound use topical agent
- **3.** Get rid of infection– Antibiotics

4. Nutrition support

5. Blood sugar control





Treatment

- requires 6 weeks of appropriate antibiotics
- Surgical debridement and culture
- aggressive wound management (topical antimicrobial dressings, absorbent dressings)
- off-loading strategies for any plantar foot wound
- Negative pressure wound therapy may be used for postsurgical open wounds with adequate vascular supply
- hyperbaric oxygen therapy for patients with diabetes



CASE STUDY

Case 1 Female 64 years old Dx. COM Lt. heel underlying DM









Case 2

Female 37 years old Dx. COM Lt. Leg Wound size 1.3x3.5x2 cm. expose bone moderate exudates









Summary

Prevention of Osteomyelitis is very important especially infective DM foot



Thank You

