

Clinical Practice Guideline Overview

Management of Surgical Site Infections

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This clinical practice guideline addresses the management of surgical site infections occurring in patients who have undergone orthopaedic surgery.



Literature Review

10,804
abstracts reviewed



2,463
articles recalled
for full review



230
articles included
after full text review and
quality analysis



Strong and Moderate Guideline Recommendations*



Strong evidence supports that synovial fluid and tissue cultures are strong rule-in tests for the diagnosis of infection; negative synovial fluid and tissue cultures do not reliably exclude infection.



Strong evidence supports that C-reactive Protein is a strong rule-in and rule-out marker for patients with suspected surgical site infections.



Moderate strength evidence supports that clinical exam (i.e. pain, drainage, fever) is a moderate to strong rule-in test (i.e. high probability of presence of infection, if test is positive) for patients with suspected surgical site infections, but a weak rule out test.



Moderate strength evidence supports that patients meeting one or more of the following criteria are at an increased risk of infection after hip and knee arthroplasty: chronic kidney disease; diabetes; tobacco use/smoking; malnutrition.



Moderate evidence supports that, in the setting of retained total joint arthroplasty, antibiotic protocols of 8 weeks do not result in significantly different outcomes when compared to protocols of 3- to 6-month duration.



Moderate evidence supports that rifampin, as a second antimicrobial, increases the probability of treatment success for staphylococcal infections in the setting of retained orthopaedic implants.

Strong evidence supports the following factors are associated with an increased risk of infection:

- Anemia
- Duration of hospital stay
- Immunosuppressive medications
- History of alcohol abuse
- Obesity
- Depression
- History of congestive heart failure
- Dementia
- HIV/Aids



Future Research

Consideration for future research is provided for each recommendation within this document are based on the work groups clinical experience and perceived need for better guiding data.

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* To view limited and consensus recommendations and all recommendation rationale, visit OrthoGuidelines.org

