Musculoskeletal Infection
Inpatient Management

Admit to Hospitalist, Consult Ortho and ID.

Is patient critically ill?

- YES
  - Manage Off Pathway

- NO
  - Does patient have adequate source culture/pathology pending?

- NO
  - Have all possibilities for obtaining a source culture been exhausted?
    - Evidence clearly indicates improved outcomes (decreased antibiotic side effects, decreased need for, and fewer complications of PICC line use) if therapy directed by source culture. If deemed clinically safe (See Initial Therapies: ED and Inpatient), withhold antibiotics until source culture obtained.

- YES
  - If patient condition allows and not contraindicated by bacterial differential based on exposures or history, cover narrowly with IV agent with oral alternative and follow cultures and assess clinical response:
    - a) Greater than or equal to 4 years = clindamycin and/or cefazolin
    - b) 6 months to 4 years = cefazolin (cover K. kingae)
    - c) Consider both clindamycin and cefazolin for increased S. aureus coverage, in more severely ill patient, particularly if bacteremic
    - d) Consider adding vancomycin if: hip joint involved (potentially increased morbidity) for expanded MRSA coverage, severe illness, GPC bloodstream infection, multifocal infection
  
  *Narrow based on culture and susceptibility results

  - If improves, treat intravenously until:
    - Clinically substantially improved (weight bearing if allowed, well appearing)
    - Tolerating orals
    - Afebrile x 24 hours
    - Known susceptibilities
    - Falling CRP
    - If blood cultures positive, repeat daily until negative x 48 hrs.
    - Greater than or equal to 3 days of bacteremia evaluate for intravascular infection and/or other foci, anticipate longer course of intravenous antibiotics.
    - Also consider longer course of intravenous treatment if adequate drainage not achieved, unusual organism(s), hip joint involvement, multifocal disease, unusually severe diseases or documented S. aureus bacteremia.

  - If does not improve, consider:
    - Repeat laboratory assessment
    - Repeat drainage
    - Repeat imaging
    - Repeat cultures
    - Expand/change antibiotics
    - Alternate diagnoses

**DISCHARGE PLANNING:**

- Arrange home antibiotics including IV therapy if indicated, and assure family understands importance of compliance, can purchase medication, and understands possible side effects of antibiotics (see table 1) and PICC line use if applicable. Follow up appointment scheduled with ID in 1 week
- Home Health weekly monitoring labs (CBC, ESR, CRP, (Chem 8).

- Refer to table 1 or inpatient order set for antibiotic choices, dosing and side effects.

Disclaimer: Pathways are intended as a guide for practitioners and do not indicate an exclusive course of treatment nor serve as a standard of medical care. These pathways should be adapted by medical providers, when indicated, based on their professional judgement and taking into account individual patient and family circumstances.

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