

SCOTTISH RITE



JUDGMENT UNDER UNCERTAINTY DURING THE EVALUATION OF CHILDREN WITH SUSPECTED MUSCULOSKELETAL INFECTIONS

Lawson A.B. Copley, M.D.

There has been a dramatic increase in musculoskeletal infections (MSI) in children in the last twenty years. Copley recognized this as a problem in North Texas in 2002 and says the climate in this region plays some role in the increased incidence here.

MSI is a collection of many conditions with similar presentations which can present on a broad spectrum of illness severity. Unfortunately, this often results in inaccurate or delayed diagnoses or referral for appropriate evaluation and care.

Copley encourages health care providers to use caution in evaluating patients with possible MSI. In his experience, there are a handful of conditions that are likely diagnoses for children presenting with infectious symptoms. However, he emphasized that there are many other diagnoses that should not be ignored in the systematic evaluation of these children. The most common conditions include:

- Osteomyelitis
- Septic arthritis
- Transient synovitis
- Pyomyositis
- Complex skin and skin structure infections

Familiarizing yourself with the patterns of presentation of these conditions will help guide your treatment and referral decision making process. There is risk in jumping to a conclusive diagnosis too quickly, but these patterns can help you improve the patient and family experience.

Though he warns it is tempting to over-simplify, Copley reiterates a few general thoughts based on his extensive work to improve patient-centered care and outcomes with this population:

- History is helpful – was there trauma?

- Physical exam – is there sensitivity to palpation or joint range of motion?
- Collect labs before administering antibiotics.
- Clindamycin should be considered until the culture results are available direct antibiotic selection.
- X-ray of the focal area of concern identified during history and physical exam. Many conditions can be properly managed with limited imaging (fewer X-rays and MRI sequences, contrast rarely needed).

ABOUT THE AUTHOR

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