

## The Curious Case Of Kocher; Gluteal Abscess Mimicking Hip Septic Arthritis

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### INTRODUCTION:

The Kocher Criteria for septic arthritis is widely used in distinguishing between septic arthritis and transient synovitis of the hip in children. However, other modalities, including ultrasonography must also be considered to reach the correct diagnosis. In our case, although all the criteria prescribed by Kocher were fulfilled, neither septic arthritis nor transient synovitis was the culprit for the patient's hip pain.

### CASE PRESENTATION:

A 2-year-old girl presented with high grade fever, acute pain in the right hip and refusal to bear weight. There was mild URTI recently. Otherwise, no recent trauma or other medical problems were reported. On examination, she was febrile (T: 40.2°C), and the right hip was in flexed and abducted position with limited range of motion. There was tenderness at the hip joint line, but none at the gluteal. No erythema or swelling was noted. There was no significant findings in the X-ray of the right hip in comparison to the left (Figure 1).



Figure 1

With a TWBC of 20,800 cells/mm<sup>3</sup>, and ESR of 73mm/hour, all the variables in the Kocher Criteria were positive. Urgent ultrasonography showed presence of intramuscular lesion in the right gluteus medius and minimus (Figure 2). No right hip joint effusion was seen in the ultrasound, prompting revision of diagnosis to intramuscular gluteal abscess. Patient was treated with parenteral antibiotics for 2 weeks followed by oral antibiotics for 2 weeks. After treatment, she was able to bear weight and ambulate with normal gait. Repeated ultrasound after 1 month showed resolution of the intramuscular collection (Figure 3).

### DISCUSSIONS:

Kocher et al.'s clinical prediction algorithm utilises 4 independent criteria to estimate probability for septic arthritis, predicting 99.6% when all four variables were positive<sup>[1]</sup>. In our patient, despite Kocher Criteria fulfilled, the diagnosis was not septic arthritis, as evidenced by the ultrasound results and outcome of the treatment. More recent advances in the management of hip septic arthritis in children support the routine use of ultrasound in a child presenting with hip pain.<sup>[2]</sup> However, some centres still practice prolonged course of intravenous antibiotics combined with aggressive surgery.<sup>[3]</sup>

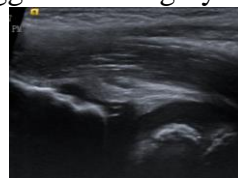


Figure 2



Figure 3

### CONCLUSION:

The Kocher Criteria for septic arthritis is a helpful tool in diagnosing septic arthritis of hip in paediatrics patients. However, ultrasonography of the hip is very important before committing to an arthrotomy washout, as other pathologies that mimic septic arthritis of the hip may be revealed, as in our curious case of gluteal abscess. We suggest a further study to include ultrasonography as a modality to supplement the Kocher Criteria to diagnose hip septic arthritis.

### REFERENCES:

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