TWO CASES OF STERNAL KINGELLA KINGAE OSTEOMYELITIS

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Background

Kingella kingae has increasingly been associated with osteoarticular infections in preschool children. Often it is regarded as a subacute infection with less inflammatory reaction than Gram-positive infections like *S. aureus*. Sternal osteomyelitis is rarely reported in the literature. We here report two cases with sternal osteomyelitis due to *K. kingae*.

Case Presentations

Case 1. A 21 months old boy was admitted due to parasternal swelling since 10 days. No fever was reported and CRP peaked at 21 mg/L. Total WBC were 12×10^9 /L. Ultrasound and MRI was performed (Figure 1). Fine needle aspirate was negative in cultures but 16S rRNA Gene Sequencing detected *K. kingae*. He was treated with intravenous cefotaxime for four days and amoxicillin/clavulanate for a total of four weeks. Follow-up ultrasound showed regression of the infection.

Case 2. An 8 months old girl presented to the paediatric ER with fever and a swelling at the lower part of the sternum. CRP peaked at 156 mg/L and total WBCs were 20×10^9 /L. Ultrasound showed an abscess directly adjacent to the sternum. Culture from the aspirate was negative but 16S rRNA Gene Sequencing detected *K. kingae*. She was treated with intravenous cefotaxime for six days and amoxicillin/clavulanate for an additional four weeks. CRP normalised in a week and follow-up ultrasound showed partial resolution of the abscess.

Learning points/Discussion

Sternal *K. kingae* osteomyelitis is rare. The cases presented here show that *K. kingae* sternal osteomyelitis may present with mild symptoms and low-grade inflammation (Case 1) as well as with fever and intense inflammation (Case 2). PCR is needed for detection of *K. kingae*.

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