

## **PRIMARY SOLITARY METACARPAL OSTEOMYELITIS CAUSED BY KLEBSIELLA PNEUMONIAE: A CASE REPORT**

Koogulakanth Chandra Sekaran<sup>1</sup>, Nantha Kumar V P Baskaran<sup>1</sup>, Arvin Valuyeetham<sup>1</sup>, Abdul Rauf  
Kamarul Zaman<sup>1</sup>, Akmal Hadi Minghat<sup>1</sup>

<sup>1</sup>Hospital Melaka

**Introduction:** Osteomyelitis is an infection of bone characterized by progressive inflammatory destruction and opposition of new bone. The most common causative microorganism is *Staphylococcus aureus* however, other type of infective agent like coagulase-negative staphylococci, beta-haemolytic streptococci, *Streptococcus viridans*, enterococci, aerobic Gram-negative bacilli (*Pseudomonas* and *Enterobacter* sp. and *Escherichia coli*), anaerobes, and *Mycobacterium tuberculosis* has been reported. *Klebsiella pneumoniae* is a rare causative agent in adults. We have reported a case of primary solitary metacarpal osteomyelitis caused by *Klebsiella Pneumonia*.

**Discussion:** Our patient is an adult suffering osteomyelitis with diabetes as the only risk factor. It is postulated that hyperglycemia might facilitate growth of capsular polysaccharides of *Klebsiella pneumoniae* and the result is this capsule may be more able to resist phagocytosis. She also responded well with the antibiotic given. The limitation here was to isolate the bacteria and to perform serotyping to determine the strain of isolated bacteria.

**Conclusion:** Diabetes mellitus is an important medical condition that may increase risk of osteomyelitis. Infected tissue or bone may also yield rarer types of bacteria such as in this case *Klebsiella pneumoniae* was cultured.