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## A CASE OF PAEDIATRICS OSTEOMYELITIS : REVISITED Abstract ID : PP-10743

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Garden of Knowledge and Virtue

# A CASE OF PAEDIATRICS OSTEOMYELITIS : REVISITED

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#### INTRODUCTION

- Incidence of osteomyelitis is 8/100000 children reported<sup>3</sup> with gradual increment that affecting children less than 5 year-old
- Higher incidence in males, and frequently involve the hip, knee and ankles.
- Morbidities such as growth arrest can lead to permanent disability<sup>2</sup>

#### CASE REPORT

- 16 months old girl presented to us with painful limp of right hip for 2 days with history of fever and upper respiratory tract infection 2 weeks prior.
- Kocher criteria scored 3 but ultrasonograpy of the hip joint was negative for effusion.

• Pelvis radiograph showed lytic lesion of proximal femur.



• She was treated as subacute osteomyelitis parenteral cloxacillin

- Parenteral cloxacillin were given for 2 weeks
- Clinical and biochemical markers were reducing hence she was discharged with oral cloxacillin



- Total duration of antibiotics given was for 4 weeks before she represented with recurrent right hip pain without fever.
- Repeated radiograph showed worsening lesion and ultrasound showed suspicious early abscess formation.



• She underwent surgical drainage of the collection and curettage of diseased bone and was put on hip spica as it involved about 60% of the cortical circumference for 6 weeks.



- Intravenous ampicillin and sulbactam is given in ward and discharge with oral amoxycillin-clavulanic acid as there was no syrup form of the previous antibiotics.
- Total duration of antibiotics given post operatively was 6 weeks.
- Hip spica also was kept for 6weeks before it was removed and weight bearing was allowed.
- All blood and tissue cultures taken were negatives.

#### RESULT

• At post op 6-month review, she obtained pain free full range of motion thou there was 1cm limb length discrepancy.



 Further review needed to assess any deformity in particular shortening or coxa valga, but unfortunately she was missing from the follow up.

### DISCUSSION

- Staphylococcus aureus remains the commonest organism which account about 70% - 90 % of cases hence cloxacillin is the treatment of choice<sup>1,2,3</sup>
- Streptococcal infection should be considered in child less than 5 years old<sup>1</sup>.
- New arising pathogen leading to osteomyelitis is Kingella Kingee, which is usual commensal of oropharynx in children, affecting children with the age group of 6 months to 4 years reported<sup>3</sup>

- Positive blood cultures revealed in 55% of cases, hence antibiotics type is a dilemma in case of unresponsiveness.
- Combination of antibiotics or single antibiotics usage should cover the possible organism that may cause the infection.
- FDA reported combination of ampicillin and sulbactam is effective against staphylococcus, gram negative and positive organisms

 Involvement of greater trochanter physis arrest due to this disease may give rise to coxa valga<sup>4</sup>



#### REFERENCES

- 1. Gutierrex et al, (2005), Bone and Joint Infections in Children, Pediatr Clin N Am 52.
- 2. Goldschmidt RB et al, (1991), Osteomyelitis and septic arthritis, Curr Ortho 5:248-255.
- 3. Castellazzi L et al, (2016), Update on the management of pediatric acute osteomyelitis and septic arthritis, Int J Mol Sci
- 4. Raney et al, (1993), Premature greater trochanteric epiphysiodesis, JPO

