

Infant with Multifocal Osteomyelitis

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INTRODUCTION:

Multifocal osteomyelitis is rare but potentially cause morbidity and mortality^{2,3}. Higher risk in infants and older children with risk^{2,3}. Incidence reported 20-50% in all neonates with osteomyelitis^{1,3}

REPORT:

3-month-old boy, born premature at 35 weeks, had reduced left upper limb movement for 1 week without history of trauma. 2 weeks prior, he had vaccination to right thigh and fever secondary to tonsilitis where he was prescribed with amoxycillin. Examination revealed left shoulder reduced motion with swelling and erythema. Radiograph showed callus over clavicular fracture and ultrasound showed subcutaneous edema. Infective parameters were raised. Initial diagnosis were cellulitis with healing clavicle fracture and parenteral cloxacillin was started.



Figure 1: left clavicle radiograph at initial (left) and 1 week later (right)

Clinical condition not improving despite 7days antibiotics and repeated radiographs showed lytic lesion with extensive periosteal reaction, hence raised the suspicious of osteomyelitis where it was confirmed with MRI. MRI revealed osteomyelitic foci at left clavicle and scapula, T1 to T7 ribs and left humeral head. Parenteral ceftazidime was added. He responded well with improved clinical condition and blood parameters.

At 3weeks of admission, noted reduced motion and swelling over right forearm. Radiographs of the right radius and ulna showed similar changes as left clavicle.

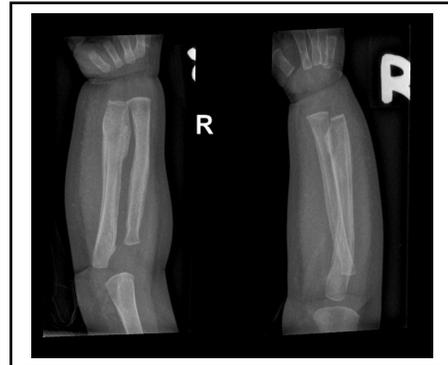


Figure 2: Radiograph of right radius ulna

Radionuclide imaging detected high uptake at bilateral radius and ulna, left clavicle and left ankle. Due to multiple bones involvement, syrup rifampicin was added for 2weeks. Patients responded well to the antibiotics regime clinically and biochemically and was discharged well. Review at 6weeks from the first diagnosis, he was active and well.

CONCLUSION:

Whole body MRI^{1,2} or radionuclide imaging³ are suggested for suspected cases. Antibiotics should cover for staphylococcus, gram negative and positive^{1,2}. Short duration of rifampicin may be considered in case of unresponsiveness¹.

REFERENCES:

- 1.Somford MP, et al.,J Orthop Res Physiother 2015,1:015
- 2.Papan C et al,Klin Padiatr 2020
- 3.Howman Giles et al,Clinical Nuclear Medicine, Apr 1992