

A Rare Case of Distal Radius Osteomyelitis in An Eleven Years Old Girl

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INTRODUCTION:

Radius is rarely involved in acute osteomyelitis. Non-specific clinical symptoms and subtle changes on radiograph during the early stage of the infection might cause a delay in diagnosis. We are presenting a case of an 11-year-old girl whose diagnosis was delayed.

CASE REPORT:

An 11-year-old girl without comorbid presented to us with constant right forearm pain with fever. We noted that the child had a diffuse erythematous swelling over the right radius extending till the middle forearm, tender and warm. Magnetic resonance imaging showed intramuscular abscess with distal radial growth plate disturbance. We decided on surgical drainage along with initiation of cloxacillin, using two incisions, one over the distal radius and another over proximal radius. Intraoperatively we noted 100cc of pus was evacuated, tracking from distal radius to proximal, with periosteal damage and intraosseous pus. Ryle's tube was used to wash out the intramedullary canal. Tissue and bone cultures showed staphylococcus aureus.



Fig. 1(a,b): Plain radiograph showing osteolytic changes in the distal radius.



Fig. 2. Intraoperative picture of our incision and drainage over the right forearm

DISCUSSION:

Two of the following are required to confirm the diagnosis of osteomyelitis, a positive culture or radiographical evidence with localized swelling, erythema, and tender over the affected limb.¹ Symptoms of osteomyelitis include fever and bone pain. However, fever may not be present all the time and bone pain may be exhibited by children as pseudo paralysis or refusal of movement of the affected limb especially in young children¹. Subtle symptoms could be misinterpreted by primary care doctors as fractures or soft tissue injury.

CONCLUSION:

An initial diagnosis of osteomyelitis should be made until proven otherwise because if not treated as soon as possible the long-lasting morbidity will affect the child's growth and future development.

REFERENCES:

1. Sonnen GM, Pediatric bone and joint infections. Diagnosis and antimicrobial management 1996 Aug;43(4):933-47. doi: 10.1016/s0031-3955(05)70443-0.