Primary Subacute *Klebsiella pneumoniae* Osteomylitis Of Radius In An Adolescent Focal Segmental Glomerulosclerosis Patient: A Case Report

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INTRODUCTION:

Klebsiella pneumoniae is frequently seen in immunocompromised patients and usually preceded with respiratory or urinary tract infection. We present a rare case of subacute primary *Klebsiella pneumoniae* osteomyelitis in a young immunosuppressed patient.

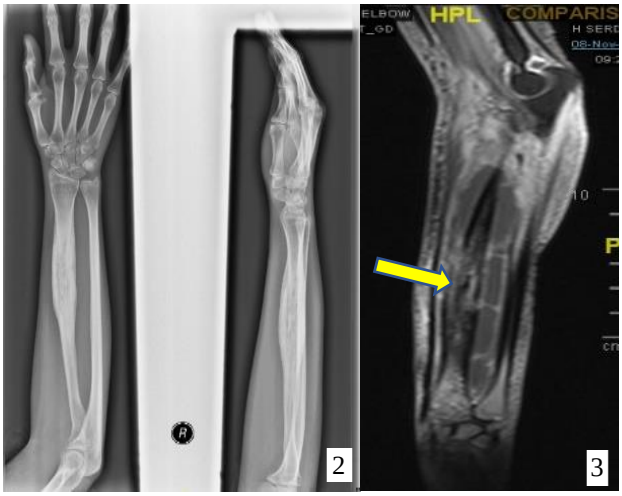
CASE REPORT:

A 17-year-old female with underlying Focal Segmental Glomerulosclerosis on steroid therapy and family history of lymphoma, presented with insidious right forearm pain and swelling. There was no preceded trauma, but she was admitted 4 months ago for cellulitis of the right forearm and was discharged well. On examination, there was a circumferential diffuse tender swelling over middle right forearm. Blood investigations showed leukocytosis with raised ESR and CRP. X-rays showed midshaft of radius expanded with periosteal reaction and intramedullary changes. MRI showed osteomyelitis of the right radius with Brodie's abscess, cloaca and subperiosteal abscess.

RESULTS:

Abscess drainage with corticotomy of right radius was performed. There was 100mls of pus with unhealthy necrotic bone measuring 9cm in length. Multiple wound debridement and antibiotic cement insertion was done subsequently. Bone, pus and tissue culture yielded *Klebsiella pneumoniae*. Histopathological examination confirmed osteomyelitis. She was treated with 6 months of antibiotics. Her right forearm had good range of movement with power of MRC grade 4.

Figure 1: Corticotomy and osteomyelitic bone.



Figures 2 & 3: X-rays and MRI of right forearm.

DISCUSSIONS:

Clinical diagnosis was a dilemma in this case. Subacute osteomyelitis may present similarly to Tuberculosis and tumour thus MRI is needed prior to intervention. The cellulitis presented 4 months ago might be the source of inoculation. Aim of management in this case was abscess drainage, medullary decompression and prolonged antibiotics treatment. There were only scanty cases reported on *Klebsiella pneumoniae* osteomyelitis and these cases were associated with systemic bacteraemia. In our case, blood, sputum and urine cultures were negative.

CONCLUSION:

Considering dynamic changing epidemiology of microorganism, Gram negative organisms should be considered in diagnosis of osteomyelitis especially in immunosuppressed patients.

REFERENCES:

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