AN UNCOMMON CASE OF SALMONELLA SEPTIC ARTHRITIS: A CASE REPORT

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INTRODUCTION:

Salmonella is commonly implicated as the causative organism for septic arthritis and osteomyelitis in patients with haemoglobinopathies and immunosuppressed patients. However, septic arthritis caused by *Salmonella* in healthy children is uncommon, with an estimated incidence rate of 0.1-0.2%.

REPORT:

We present a case of a healthy 11-month-old boy with appropriate developmental milestones who presented with right shoulder swelling for 3 days. Upon further history, patient had an episode of fever and diarrhea 2 weeks prior to onset of right shoulder swelling which was treated with a course of oral antibiotics and patient lives in a fishing village near Tioman Island.

Clinically right shoulder appeared swollen and tender upon palpation but not warm or erythematous. Child refused to move his right shoulder and was frightful during examination. Blood investigation revealed elevated values of C-reactive protein, erythrocyte sedimentation rate and total white cell count with neutrophil predominance. Full blood profile revealed inflammatory cell changes with no haemoglobinopathies.

Patient was diagnosed with septic arthritis and osteomyelitis of proximal right humerus and underwent multiple arthrotomy washout of the right shoulder joint due to persistent discharge and recurrent swelling over his right shoulder joint. All bone and tissue samples sent for culture from multiple operations yield the growth of Salmonella *sp.* however multiple repeated blood cultures revealed no growth. Patient achieved complete recovery with good range of motion over his right shoulder after antibiotics completion for the duration of 12 weeks guided by serial septic parameters.



Figure 1 : Shoulder radiograph on presentation showed Subtle periosteal reaction over proximal humerus on initial presentation



Figure 2: Shoulder radiograph after completion of antibiotics with irregular growth plate with sclerosis of proximal humerus

CONCLUSION:

Salmonella is a well-known cause of septic arthritis and osteomyelitis in patients with sickle cell disease but only a few reported cases of salmonella bone and joint infection in a healthy child.

In this case history taking including patient's demographic details were essential to obtain the diagnosis therefore highlights the importance of obtaining finer details during history taking.

REFERENCES:

1. Howes M, Akram A. An unusual case of Salmonella septic arthritis. International Journal of Infectious Diseases. 2020;101:141