Spina Ventosa – A Rare Disease

¹Pavithiran R, ²Darsindra B, ³Tan HP, ⁴Mohd Shaharil, ⁵Satriya SHA

¹Department of Orthopedic, Hospital Tengku Ampuan Rahimah Klang, ²Department of Orthopedic, Hospital Tengku Ampuan Najihah Kuala Pilah.

INTRODUCTION:

Spina ventosa (Tuberculous dactylitis) is an uncommon form of extra-pulmonary tuberculosis involving the small bones of the hand and feet. The disease is cystic type, and quite uncommon after the age of 5 years old. The incidence of Tuberculous dactylitis in children is only 0.65-6.9% and it accounts for only 10% of all cases of skeletal tuberculosis (TB)¹.

REPORT:

We present a 5-year-old boy with immunization up to age, had developed right foot swelling for five months at the age of 2 years old. The swelling was not increasing in size and patient had difficulty to thrive, but no fever.

Plain radiograph showed well-defined expansile lesion involving the entire first metatarsal bone (MTB) with narrow zone of transition and lamellated periosteal reaction. MRI showed patchy enhancing lesion in the first MTB.



Figure 1: Plain radiograph of right foot

Biopsy was done and the histopathology slides showed granulomatous inflammatory lesion with caseation necrosis. Without delay, anti-TB medication was initiated and continued for total of one year duration.

Subsequent follow-up in outpatient clinic, patient able to ambulate well and the swelling has subsided completely.



Figure 2: Plain radiograph of right foot (after completion of anti-TB)

DISCUSSION:

Tuberculosis dactylitis, it is called as spina ventosa because of its appearance as "air-filled balloon". It causes a subacute to chronic painless swelling of the small bones of the hand and feet. It can lead to severe destruction of the involved bone with shortening if left untreated¹. Diagnosis is confirmed by imaging and cytopathology. Frequently, case of Tuberculous dactylitis was mistaken as a bacterial osteomyelitis. However, its benign course and the absence of fever differentiate it from acute osteomyelitis¹.

CONCLUSION:

Patient with tuberculous dactylitis show a marked clinical and radiologic improvement with anti-TB treatment.

REFERENCES:

1. Kriti Mohan et al, spina ventosa of metatarsal, journal current orthopedics practice, 2013; Pg 441-44