TUBERCULOSIS OF THE FLAT BONE OF THE VAULT OF SKULL - A CASE REPORT

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Summary: A rare manifestation of tuberculosis involving the vault of skull and presenting as a non-healing discharging wound over the parietal skull bone is reported.

INTRODUCTION

Tuberculosis of the flat bones of the vault of skull is rare and is considered secondary to an active or latent tuberculous lesion elsewhere in the body. We are reporting a case of tuberculous osteomyelitis involving the parietal bone of the skull.

CASE REPORT

A 19 year old non smoker male presented with a non-healing wound, discharging yellowish pus over the right parietal bone of skull vault. Two months earlier, the patient sustained a minor trauma to his head followed by a swelling at the same site after six weeks, which was incised by a general practitioner, mistaking it for an infected hematoma. Initially, the wound healed but then it started discharging yellowish pus. There was no history of cough. The patient was anaemic without any lymphadenopathy. Systemic examination was normal.

Local examination revealed a 5 x 7 cms non-healing wound eroding the parietal skull bone with undermined edges, discharging yellowish pus, over the right parietal bone (Fig. 1). The pulsations of the dura synchronous with the radial pulse were clearly visible at the bottom of the wound.

In the laboratory investigations, haemoglobin was 9.8 gm%, total and differential leucocyte counts were within normal limits, ESR was 68 mm/1st hour (Westergren’s method). Pus smear was negative for acid fast bacilli. Repeated cultures of the discharge from the sinus were sterile. Skiagram chest PA view was normal. X-ray skull AP view revealed a lytic area in the parietal bone (Fig.2). Other radiological and imaging investigations did not reveal visceromegaly and lymphadenopathy anywhere else in the body. Mantoux test was strongly positive (26 x 26 mm). ELISA for HIV was negative and VDRL was non-reactive. Wedge biopsy from the skull wound revealed histological features compatible with tuberculous osteomyelitis (Fig. 3).

Fig. 1. Photograph showing discharging sinus over the right parietal skull bone

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The patient was treated with standard short course chemotherapy (2HRZE/4HR) which was followed by complete healing of the skull wound with granulation tissue, without any discharge, after completion of 2 months of initial intensive phase of chemotherapy. Subsequent follow-up in continuation phase is satisfactory.

**DISCUSSION**

The first authentic case of tuberculosis of skull was reported by Ried in 1842. It is an extremely unusual site for skeletal tuberculosis, because of little cancellous bone in the flat bones since tuberculosis of the bone, in general, usually begins in the cancellous portion of the bone involved.

**REFERENCES**

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Fig. 2: X-ray skull AP view showing lytic area in the parietal bone.

Fig. 3: Microphotograph showing caseating granuloma-tous inflammation involving skin and underlying structures, in the biopsy taken from the edge of the discharging sinus (H & E stain x 200).

This case is a rare presentation of tuberculous osteomyelitis of the flat bone of the skull and the importance of histology in making the correct diagnosis of a non-healing wound overlying a lytic bony lesion. No active tuberculous focus elsewhere, suggestive of primary focus, could be located in the present case. It illustrates the role of hematogenous dissemination from a primary tuberculous focus, subsequently becoming active after minor trauma.