

Scalp vein sign: a forgotten clinical clue?

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DESCRIPTION

A 72-year-old man presented for general health check. He was asymptomatic except for hard of hearing and uses hearing aid for the last 4 years. Clinical examination revealed very prominent tortuous superficial temporal veins bilaterally, more on the left side (figure 1) with no bruit and a warm non-tender skull on palpation. Serum chemistries showed significantly elevated alkaline phosphatase 1520 U/L (normal, 45–140 U/L) with normal liver, kidney and haematological parameters. Serum calcium, phosphorus, 25-hydroxy vitamin D and parathyroid hormone levels were normal. Skull radiograph showed moth-eaten appearance suggestive of Pagetoid bone (figure 2). With this clinico-biochemical picture in an otherwise asymptomatic individual, Paget's disease of bone was strongly considered. It was confirmed by significant uptake of technetium-methylene diphosphonate (MDP) in skull and right hemipelvis. He was managed with intravenous zoledronic acid, calcium and vitamin D supplementation. Serum alkaline phosphatase normalised at 6 months follow-up, though hearing and scalp vein distension did not improve significantly. Paget's disease of bone, hitherto considered to be rare, is now being increasingly diagnosed in India.¹ Skull involvement is commonly seen in polyostotic

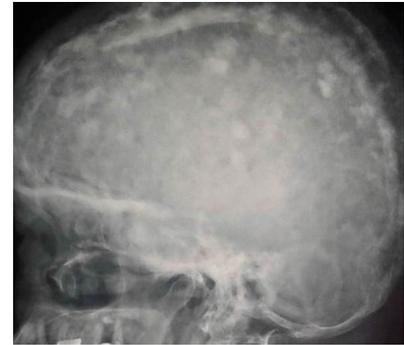


Figure 2 Lateral view of skull radiograph showing the typical 'moth-eaten' appearance of Pagetoid bone.

Paget's disease. Prominent superficial temporal vein which occurs due to increased vascularity and arteriovenous shunting was earlier described as 'Scalp vein sign'.² In a case series of 290 patients, this sign was observed in 45% of those with skull involvement³ and hence may serve as a useful clinical clue in asymptomatic individuals. Conditions which could mimic this sign include giant cell arteritis and metastases of follicular thyroid carcinoma, wherein the arteries become more prominent and tender.

Learning points

- ▶ Paget's disease of bone is not uncommon in South India.
- ▶ Skull involvement is very common in polyostotic Paget's disease.
- ▶ Prominent superficial temporal vein is a simple clinical sign that along with raised alkaline phosphatase may aid in diagnosis of asymptomatic Paget's disease of bone.

Contributors SM was involved in the diagnosis and management of the patient, literature search and preparation of the manuscript. ARA was involved in the diagnosis, literature search and manuscript review. SK was involved in patient diagnosis and critical review of the manuscript. DS was involved in manuscript review and critical comments.

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Figure 1 Clinical picture showing prominent, tortuous, left superficial temporal vein with hearing aid.



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