

Images In...

A bony swelling on the forehead: an uncommon manifestation of a well-known metabolic disease

R Santosh,¹ Anil Bhansali,¹ A Rajwanshi,² Viral Shah,¹ Arunanshu Behera,³ Sanjay Bhadada¹

¹Department of Endocrinology, PGIMER, Chandigarh, India;

²Department of Pathology, PGIMER, Chandigarh, India;

³Department of Surgery, PGIMER, Chandigarh, India

Correspondence to Anil Bhansali, anilbhansali_endocrine@rediffmail.com

DESCRIPTION

A 26-year-old female presented with progressively increasing bony swelling over her forehead for 4 months, when she was in her seventh month of gestation. She also had difficulty in walking. She had past history of renal stones. On examination she had bony and non-tender swellings on the forehead (figure 1), anterior part of head, right shoulder and behind the right ear. She had palpable



Figure 1 Clinical photograph showing bony swelling on the anterior forehead (arrowhead).

nodular swelling in the left thyroid region. No other features suggestive of Multiple endocrine neoplasia. On investigations, mean albumin adjusted serum calcium was 3.32 mmol/l (normal 2.15–2.55 mmol/l), inorganic phosphorus 0.64 mmol/l (0.87–1.39 mmol/l), alkaline phosphatase 5.5 μ kat/l (0.67–2.02 μ kat/l), intact parathyroid hormone 1321 ng/l (15–65 ng/l) and 25(OH)D 111.9 nmol/l (sufficient range 75–375 nmol/l). X-ray KUB revealed bilateral renal calculi. X-rays revealed osteopenia and salt and pepper appearance of the skull. Non-contrast CT scan of the head revealed multiple lytic bone lesions (figure 2). Fine needle aspiration cytology (FNAC) from the forehead lesion confirmed osteitis fibrosa cystica (figure 3). Technitium sestamibi parathyroid scan and USG neck localised a left inferior parathyroid adenoma. The patient underwent successful parathyroidectomy and histopathology confirmed parathyroid adenoma. Lytic bony lesions of the skull are not uncommon radiologically but are rare clinical findings and should alert the clinician to diagnosis of hyperparathyroidism, fibrous dysplasia, Paget's disease,

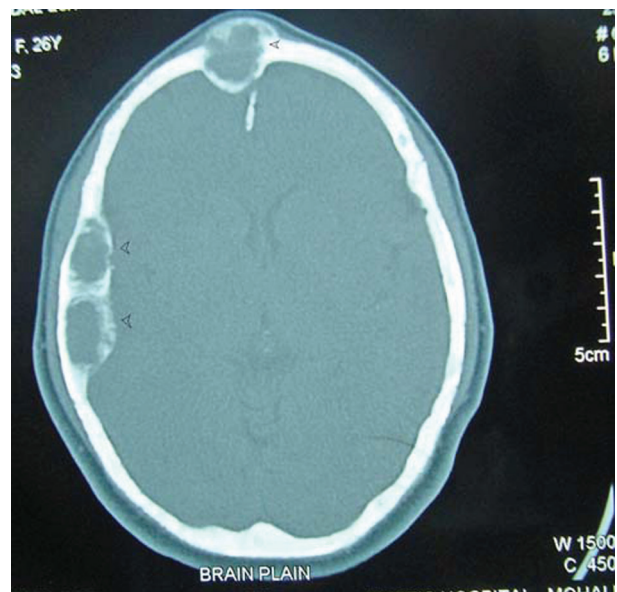


Figure 2 CT scan showing lytic bone lesions (arrowheads).

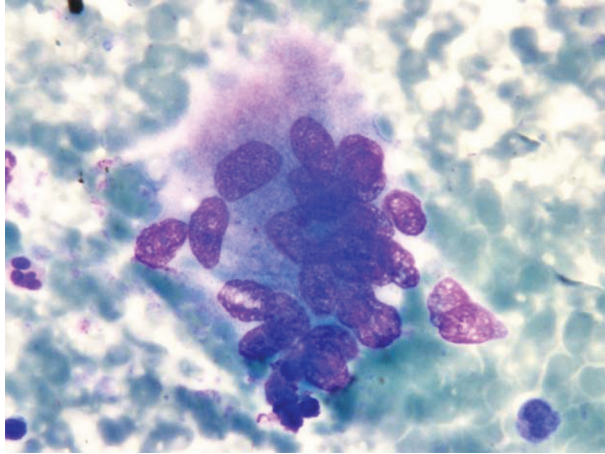


Figure 3 High power microscopy pictures of the fine needle aspiration cytology of the lytic bone lesion showing giant cells consistent with osteitis fibrosa cystica.

simple bone cyst and metastatic bone disease.¹⁻³ A calcium profile, x-rays of involved bones and FNAC should help clinch the diagnosis.

Competing interests None.

Patient consent Obtained.

REFERENCES

1. **DiagnosisPro.** Differential Diagnosis For Xray/Multiple lytic lesions of skull. http://en.diagnosispro.com/differential_diagnosis-for/xray-multiple-lytic-lesions-of-skull/36613-154.html (accessed Sep 2009).
2. **Head and Neck Surgery.** Bony lesions of the skull. <http://headnecksurgery.wordpress.com/2009/02/05/bony-lesions-of-the-skull/> (accessed Sep 2009).
3. **Guven GS,** Beyazit Y, Kekilli M. Multiple lytic lesions on skull radiography: a diagnostic impasse. *Eur J Intern Med* 2005;**16**:622.

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