A curious case of bony streaks and stripes due to osteopathia striata

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CASE

A 47-year-old woman presented with pain in her lower back, hip and lower limbs following a road traffic accident. Prior to this, there was no significant systemic illness, or chronic medication use, no previous fragility fractures or bone pains. Family history was not significant. Clinical examination was unremarkable except for tenderness over legs, right hip and lumbar spine. There was no restriction of movements at any joint. Skeletal radiography was performed to exclude the presence of fractures (figures 1-3).

A frontal radiograph of the legs revealed linear sclerotic striations extending along the metaphyses and diaphyses of the tibiae and fibulae (figure 1). Radiographs of the pelvis revealed fan-like striations extending across the ilium (figure 2). Similar striations were also seen in the X-ray of the lumbosacral spine (figure 3). With the above features on radiography, a diagnosis of osteopathia striata was made. This is usually an incidental finding diagnosed during radiographical examination that is performed for other indications. Her bone mineral biochemistry was normal. A lateral X-ray of the skull performed to rule out cranial sclerosis was found to be normal (online supplementary file)



Figure 1 Linear striations extending along both tibiae and fibulae.



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Figure 2 Fan-like striations extending along ilium.



Figure 3 Linear striations along lumbosacral spine.

DISCUSSION

Osteopathia striata, eponymously known as 'Voorhove's syndrome' is a benign sclerosing skeletal dysplasia. Familial cases may occur due to mutations in the WTX gene on the X chromosome.² Its pathognomonic feature is the presence of linear striations involving the metaphysis and diaphysis. Patients are asymptomatic or may present with non-specific symptoms. When associated with cranial sclerosis, it may cause macrocephaly, frontal bossing and neurological deficits.³ There are no laboratory tests specific for this condition, and no known therapy exists until now. Thus, osteopathia striata at best is a rare sclerosing dysplasia of the bone and is indeed a radiological curiosity.

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