

Osteopoikilosis - Spotted bone

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Figure 1: X-ray image of patients left hand

A 21 YEAR OLD GIRL PRESENTED AT THE orthopaedic clinic of Ibri Regional Hospital, Oman, with history of vague pain of the left wrist. The X-rays of the wrist showed multiple small osteosclerotic lesions. Her blood investigations were normal ruling out systemic disease. Her ESR (erythrocyte sedimentation rate) was normal. She had no other

symptomatology. Her skeletal survey was normal. A diagnosis of osteopoikilosis was made.

Osteopoikilosis, or spotted bone, is a rare autosomal dominant bone disorder of unknown pathology seen incidentally on X-rays.^{1,2} It was initially described by Albers-Schonberg and Ledoux-Lebard and associates in the year 1915.³ It is usually detected as an incidental finding in X-rays taken for other conditions. There are multiple small (2-10 mm) well circumscribed round or oval areas of increased bone density widely distributed in periarticular areas.⁴ The distribution is symmetrical. It develops in childhood and persists throughout life. There is predilection for the epiphysis and metaphysis of the long tubular bones, carpus, tarsus, pelvis and scapula.⁴ Lesions of the spine, skull, ribs and scapula are rare. It should be differentiated from osteoblastic bone metastasis, osteopathia striata, melorheostosis and tuberous sclerosis. The oval lesions of osteopoikilosis are often oriented with their long axis parallel to the shafts of tubular bones.²

It is usually asymptomatic, but in 15-20% of patients there may be slight articular pain and joint effusions.³ In approximately 25 % of cases whitish fibrocollagenous infiltrations (Buschke-Ollendorf Syndrome) are found.³ Histopathological study reveals a picture similar to bone islands, with focal condensations of compact lamellar bone with the spongiosa. Bone scans are normal. The recognition of this condition by plain radiograph makes other expensive investigations unnecessary.⁵

CONCLUSION

Osteopoikilosis should be included in the differential diagnosis of sclerotic bone lesions and, if diagnosed, has not much clinical significance.

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