

## PARA-ARTICULAR OSSIFICATIONS ASSOCIATED WITH MELORHEOSTOSIS LÉRI

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A case of para-articular ossifications associated with melorheostosis gave differential diagnostic problems, as the only symptom referred to the ossifications in the left knee region.

*Key words:* melorheostosis; para-articular ossification

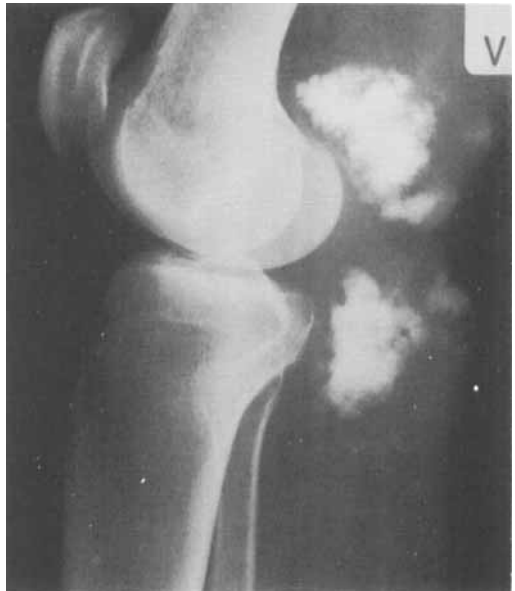
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Melorheostosis is not an unusual disease. It was first described 1922 by Léri & Joanny, and since then nearly 200 cases have been published (Campell et al. 1968). This figure is probably too low as quite a number of cases are asymptomatic and only found incidentally (Dissing & Pock-Steen 1962). Morris et al. (1963) mentioned the possibility of para-articular ossifications as a rare condition related to melorheostosis, but gave no figures for the incidence. Subsequently, another four cases with para-articular ossifications combined with melorheostosis in other bones have been published (Campell et al. 1968, Gold & Mirra 1977, Milleret et al. 1972 and Simon et al. 1976).

In the Orthopaedic Department at the University Hospital we have had a patient with para-articular ossifications and melorheostosis.

### CASE REPORT

A 28-year-old man had noticed a swelling on the postero-medial aspect of his left knee for about 2 years. There were no accompanying symptoms in the left hip joint or the left foot. Roentgen examinations showed several, small, round calcifications close to the capsule of the knee without any bony disturbances (Figure 1). The



*Figure 1. Left knee region with para-articular calcifications close to the capsule.*

mass was removed, and as the primary histological diagnosis indicated that it was probably a highly differentiated chondrosarcoma, the patient was referred to the University Hospital. A new roentgen examination showed some calcifications still in the knee region, but calcifications were also seen close to the capsule of

the left hip joint (Figure 2).  $^{99m}\text{Tc}$ -diphosphate whole body scintigraphy was performed, and a very high uptake was seen in the left foot, as well as in the left knee and the left hip joint region (Figure 3). Therefore roentgen examination of the left foot was performed, and it showed peri- and endosteal, sclerotic hyperosteoses localized to the talus, the second metatarsal bone and the proximal phalanges of the second and third toes. The changes were similar to those typically seen in melorheostosis (Figures 4 and 5). A focus in the left kidney, was revealed by the scintigraphy, but urography, Gallium scintigraphy and computerized tomography were quite normal. Histological revision of the preparations from the removed tissue revealed small cartilaginous formations and bony tissue with some calcifications similar to osteochondromata, but no sign of malignancy was seen. The histological picture was comparable with that of extrasosseous melorheostosis.



Figure 2. Left hip joint region showing para-articular calcifications close to the capsule.

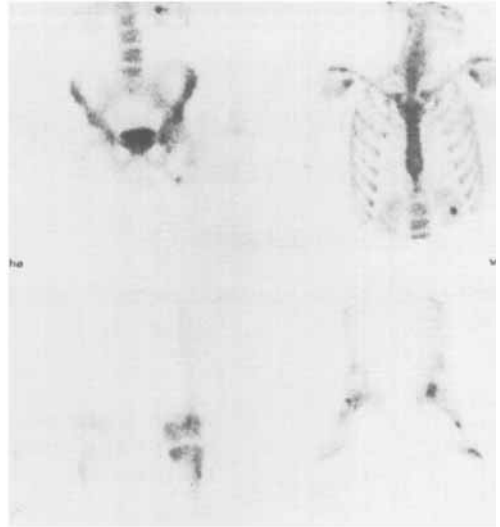


Figure 3.  $^{99m}\text{Tc}$ -diphosphate whole body scintigraphy showing high uptake in the left hip joint region, left knee region, left foot and left kidney.



Figure 4. Left ankle joint region showing melorheostosis in the talus.

## DISCUSSION

The diagnosis of melorheostosis Léri is usually very easy because of the typical disturbances in the bones, but in this



Figure 5. Left foot showing melorheostosis in the second metatarsal bone and second and third toes.

case several difficulties were encountered, as the only symptom came from a very rare manifestation of the disease. The roentgenological examinations gave the impression of synovial osteochondromata, and it was only because a  $^{99m}\text{Tc}$ -diphosphate scintigraphy gave a surprisingly high uptake in the foot that another roentgen

examination was made. The presence of a high uptake of  $^{99m}\text{Tc}$ -diphosphate in melorheostosis has, as far as we know, only been reported once (Janousek et al. 1976), and was not associated with para-articular ossifications.

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