Continuation of ORTHOPAEDIC. RADIOLOGY. PATHOLOGY CONFERENCE from page 114

PATHOLOGY FINDINGS
This patient presented with multiple skin and soft tissue swellings over a period of 9 years. According to their locations, the swellings were separately diagnosed as xanthofibroma (tendinous-fascia at elbow), xanthelasma (eye-lid), xanthoma (nose bridge), and giant cell tumour of tendon sheath (finger tendon). Review of all the biopsy material showed the same disease morphology as xanthogranulomatosis (Fig. 10). There were nodular sheets of lipid-laden foamy macrophages admixed with chronic inflammatory cells and Touton-type, multinucleated, giant cells. There were varying degrees of fibrosis in the background, and eosinophils were notably absent. In the elbow mass, there were sheets of histiocytes with kidney-shaped nuclei. They stained positively on immunostudies for Langerhans cell markers, including S100 protein and CD1a (Fig. 11). This raised the possibility of Langerhans cell histiocytosis (LCH). As Langerhans cells were not seen in the other biopsy material, and given the fact that eosinophils (important accompanying cells in LCH) were absent, the possibility of LCH was excluded in this case. On the other hand, the multifocal occurrence did pinpoint a systemic infiltrative disease rather than a coincidental occurrence of a localised disease at different sites. Xanthomatous lesions over tendons and eyelids necessitated an investigation into familial or acquired hypercholesterolaemia. This possibility was subsequently excluded by blood tests, which revealed normal cholesterol levels and lipid profiles. Without other clues, the cause of this systemic xanthogranulomatosis remained enigmatic.

RADIOLOGY FINDINGS
The initial radiograph of the left middle finger showed nonspecific soft tissue swelling around the proximal interphalangeal joint and middle phalanx. No bony erosion was noted. Computed tomography and MRI of the facial region were performed that showed soft tissue masses in the periorbital region and over the right nasal bridge (Fig. 12). No retro-orbital mass was detected. Separate MRI studies of the right knee and both ankles were subsequently performed. Apart from the prepatellar mass detected on physical examination, there were actually multiple soft tissue masses around the right knee. They were of similar signal intensity, being isointense on T1-weighted images (Fig. 13) and heterogeneously slightly hyperintense on T2-weighted images (Fig. 14). Some intralesional cystic areas were present. They were infiltrative and encased the right patellar tendon, right biceps femoris (Fig. 15), and both Achilles tendons (Fig. 16).

There were extensive irregular hypointense lesions in