BONE SCAN – ENCHONDROMATOSIS (OLLIER DISEASE)
History:

41yr old female presented for a bone scan with pain in the left hip. Lytic areas in pelvis and femur and childhood history of facial bony ‘tumour’ removal.

CT of the abdomen and pelvis, revealed presence of multiple lytic well circumscribed lesions within the pelvis and proximal femurs. This involves the left femoral head and neck of the right femur. Lytic areas are noted within the left acetabulum, the base of the ischial tuberosity on the left and the left pubic bone. Further lesions are noted within the iliac bones higher up. They are well circumscribed with sclerotic borders and could represent multiple enchondroma. No involvement of the visualised ribs are noted.

Findings: A whole body scan was performed. This was grossly abnormal. There was marked but irregular tracer uptake involving the right posterior upper parietal bone, the right periorbital bone, intense uptake by the left maxilla, also periorbitally and a focus in the left mandible (which may due to dental pathology). In the pelvis, there was abnormal tracer uptake by both posterior superior iliac spine regions, the left acetabulum, superior pubic ramus and left pubis, the right acetabulum, the left femoral head, neck, intertrochanteric region with marked but irregular tracer uptake by the left femoral shaft, and the medial femoral condyle. On the right, there was abnormal uptake by the sub trochanteric region, the proximal half of the femur, intense tracer uptake by the proximal 1/3rd of the left tibia with irregular uptake by the mid left tibia and the medial malleolus. On the right, there was abnormal, but less intense uptake of the proximal half of the tibia and the distal fibula, including the malleolus. In the feet on the right, there was intense uptake by the calcaneum, the medial cuneiform and the proximal 2nd and 3rd metatarsals and the 2nd and 3rd proximal phalanges. On the left there was abnormal tracer uptake by the distal 2/3rds of the 1st metatarsal. In the hands on the left, there was abnormal tracer uptake by the distal half of the proximal phalanx of the 2nd finger and the distal 2nd metacarpal.

There was complete sparing of the axial skeleton, ribs, vertebrae, shoulders, humeri and bones of both forearms.

Conclusion:

The findings were typical of polyostotic enchondromatosis or Ollier disease. This is a rare disease with an estimated prevalence of 1/100,000.

There was no evidence of a left hip fracture. Fractures are a common complication of this disease.