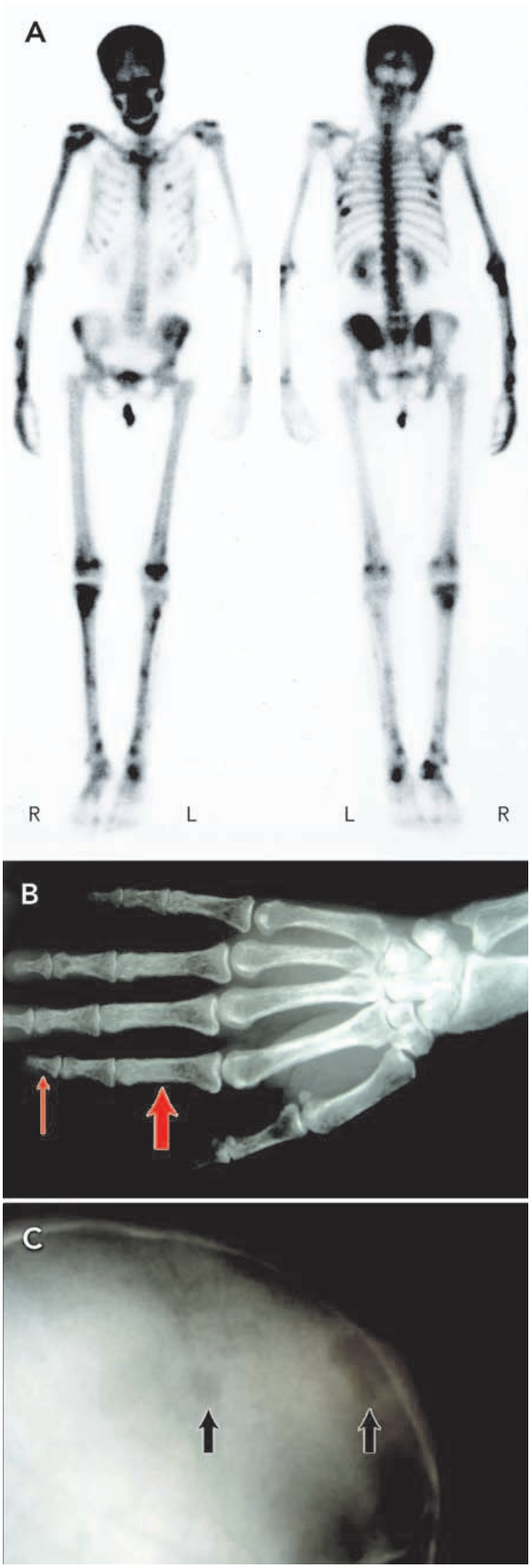

A rare case of primary hyperparathyroidism and osteitis fibrosa cystica

Primary hyperparathyroidism (PHT) complicated by osteitis fibrosa cystica (OFC) — the "classical" form of PHT — is rarely seen today. A 41-year-old woman of Sri Lankan descent presented with persistent pain in her right distal forearm 2 days after chopping vegetables. X-ray revealed a fracture through a lucent lesion within the midshaft of the right ulna. A whole-body bone scan showed numerous abnormalities of the major long bones consistent with OFC (Figure, A). Skeletal x-rays showed widespread lytic lesions with osteopenia and subperiosteal erosions, illustrated here by x-ray of the right hand (Figure, B) where marked subperiosteal bone resorption can be seen; note the ill-defined phalangeal cortex (thick arrow) and erosion of the terminal tufts of the distal phalanges (thin arrow). Skull x-ray showed "salt-and-pepper" demineralisation (Figure, C), best appreciated by the lack of visible vascular markings on the calvarium; lytic lesions are present (arrows). The serum calcium level was 4.22 mmol/L (reference range, 2.13–2.63 mmol/L). Our patient was successfully treated with a parathyroidectomy — 5 months after surgery, bone turnover markers were normal, and 14 months after surgery, bone mineral density, tested at the hip, had increased by 22%.

Anna Lih, Research Fellow
Mridula Lewis, Endocrinologist
John Carter, Associate Professor
Department of Endocrinology and Metabolism, Concord Hospital, University of Sydney, Sydney, NSW.
annaklih@gmail.com