A Calcified Gluteal Mass

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A 39-year-old man receiving chronic hemodialysis treat-
ment for 11 years complained of an increasing mass in his left gluteal region 18 months after parathyroidectomy. He had not been compliant in taking phosphate binders and a low-phosphate diet. Parathyroidectomy had been carried out with reimplantation of some tissue in the right forearm. In the following months, the painless mass increased and physically affected him. Inspection revealed a palpable, round diffuse rough structure of approximately 15 cm in diameter. A plain radiograph showed a large calcified mass (Figure 1). Serum levels of calcium and phosphate were 2.12 mmol/l (normal range 2.10–2.60) and 6.6 mmol/l, respectively (normal range 0.87–1.45). Serum level of intact parathyroid hormone was 3.7 pmol/l (normal range 1.5–6.1). Subsequently, about 50% of the calcified mass was removed surgically, revealing several cystic, fluid-filled structures and a crumbly white material infiltrating the whole gluteal muscle. Histological and biochemical analysis confirmed the presence of clinically suspected calcium-phosphate crystals. Subsequent excision of the reimplanted parathyroid tissue in the forearm led to improved calcium-phosphate metabolism and to a further reduction of the remaining gluteal mass in the following months.

Extraosseal calcification, also called calciphylaxis, is a well known complication in patients undergoing longterm dialysis, associated with high morbidity and mortality1. Formation of calcium-salt crystal deposits occurs in subcutaneous tissue and can present as a large tumor2. Although therapy primarily consists of medical treatment to reduce the calcium-phosphate product, in some cases, surgical intervention may be necessary3.

REFERENCES