

A Calcified Gluteal Mass

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A 39-year-old man receiving chronic hemodialysis treatment 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

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Figure 1. Plain radiograph of the left hip, showing a diffuse calcified mass in the gluteal region with no evident connection to femur or other parts of the skeleton.