TUMORAL CALCINOSIS: REPORT OF A CASE

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Tumoral calcinosis is a rare syndrome characterized by massive subcutaneous soft tissues deposits of calcium phosphate near the large joints. We report herein a 20 old boy with calcified lesions bilaterally involving the soft tissue over the greater trochanter. The serum calcium, phosphate and urea were normal.

Key words: tumoral calcinosis, calcified lesions, greater trochanter, exclusion

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INTRODUCTION

Tumoral calcinosis is a rare syndrome characterized by massive subcutaneous soft tissues deposits of calcium phosphate near the large joints. The condition has been reported in patients ranging from age 5 months to 83 years (Bostrom et al, 1981; Aprin et al, 1986), it usually becomes manifest in the second decade of life (Aprin et al, 1986). Men and non-whites are affected more commonly than women and Caucasians.

We report herein a 20 old boy with calcified lesions bilaterally involving the soft tissue over the greater trochanter.

CASE REPORT

A 20 year old boy presented in the surgical outpatient Clinic with swelling of both hip region of 1½ years duration, he complained of aching pain in both hips over the swelling. He denied any history of trauma.

The right trochanteric measure 15cm by 10cm, firm while and the left trochanteric mass measured 10cm by 7cm and was firm (Plate 1). X-ray of the pelvis revealed circumscribed multiple calcification over greater trochanter. Hip joints are not involved (Plate 2).

At surgery, the capsule was adherent to subcutaneous tissue, the tissue, the mass was dissected free by sharp dissection; there was significant blood loss. Postoperative recovery was uneventful.

The patient’s Clinical photograph five months post operatively is shown in Fig 3. No recurrent at 7 month follow up. Histology confirmed Tumoral calcinosis.

DISCUSSION

Tumoral calcinosis is characterized by massive subcutaneous soft tissue deposit of calcium phosphate near large joints such as hip, the shoulder, and the elbow, in addition to the wrist, feet and hands (Mitnick et al, 1980). It has also been reported in subcutaneous tissue of the abdomen and thigh following trauma (Arikawa et al, 2002).

The majority presented with a painless swelling in single or multiple periarticular regions. The hip is the most commonly affected (Pakassa et al, 1997). Idiopathic tumoral calcinosis should be diagnosed by eliminating the other diseases in which the same calcified masses are seen. Some
of these disease are chronic renal disease, hypervitaminosis, milk-alkali syndrome, Sarcoidosis, and primary hyper parathyroidism (Lafferty et al., 1965; Clarke et al., 1984) the serum calcium concentration are high in these disease, normocalcemi and hyperphosphatemia or normal phosphate level in some cases exist in tumoral calcinosis (Clarke et al., 1984; Lakhkar et al., 1991).

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A family history is apparent in 30 to 40 percent of cases, and an autosomal recessive pattern of inheritance is suggested (Harwood et al., 1996; Nedin et al., 2000). The finding by Mitnick et al (1980) support the concept of a specific enhancement in renal tubular phosphate reabsorption, probably originating in the proximal tubule. Their data also suggest that a direct effect of hyperphosphatemia to reduce urinary calcium excretion may be the mechanism through which hormonal ionized calcium and serum parathormone levels are maintained in this condition.

The valid medical treatment are surgical excision or a low-phosphorus, low calcium diet with phosphate – binding antacids. Complete surgical excision of early lesions has been recommended (Bostrom et al., 1981; Baldursson et al., 1969), but recurrence is common Baldursson et al., 1969).

The growth of recurrent masses is frequently more rapid than of the initial lesions, especially in patients with incompletely excised tumours (Kirk et al., 1981), administration of steroid, prebenecid, phenylbutazone, diphosphonates and thyrocaltcitonin, and radiation therapy have proved unsuccessful. Calcium administration is contraindicated (Lafferty et al., 1965, Kirk et al., 1981).

Spontaneous regression of the lesion have been reported while in patient with uraemic tumoral calcinosis, resolution have been seen after renal transplantation and also using continuous ambulatory peritoneal dialysis (CAPD) combined with hemodialysis with low-calcium dialysate (Niall et al 1998; McGregor et al 1999; Kuriyama et al 1998).

REFERENCES


Plate 3: 5 months post-surgery. Patient’s condition satisfactory

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