

## Case Report

# A calculus within an anal fistula tract in a diabetic patient

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### ABSTRACT

A non-insulin dependent diabetic patient with a chronic anal fistula underwent fistulectomy. At operation a calculus was discovered. The patient had an uneventful recovery and healing of the wound in 4 weeks duration. The only case reported previously was in a nondiabetic patient and interestingly from this department.

**Keywords:** Fistula, anorectal disease, abscess, diabetes, calculus.

Saudi Medical Journal 2001; Vol. 22 (2): 170-171

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Diabetics are more prone to sepsis in various sites, the foot being the most commonly affected site. Perianal abscess and fistula in ano are seen more often in immuno-compromised patients, those with inflammatory bowel disease and in diabetics.

**Case Report.** A 50-year-old male with non-independent diabetes mellitus (NIDDM) for 15 years was admitted to the hospital with a neglected compound fracture of the ankle joint and gangrenous foot. A below knee amputation was carried out. Two weeks post-operatively he complained of perianal swelling and discharge. For 10 years he had had perianal discharge that exacerbated from time to time and was treated by the patient using antibiotics and a warm saline bath. Rectal examination revealed a low fistula in ano with indurated track. Under general anesthesia fistulectomy was carried out and a 1 cm diameter calculus was found (Figure 1). The histopathology showed a fistulous tract lined by non-specific chronic inflammation. Chemical analysis of the calculus showed calcium oxalate and calcium phosphate. Both serum and urinary calcium and

phosphate were normal. Twelve months post-operatively the patient remained asymptomatic.

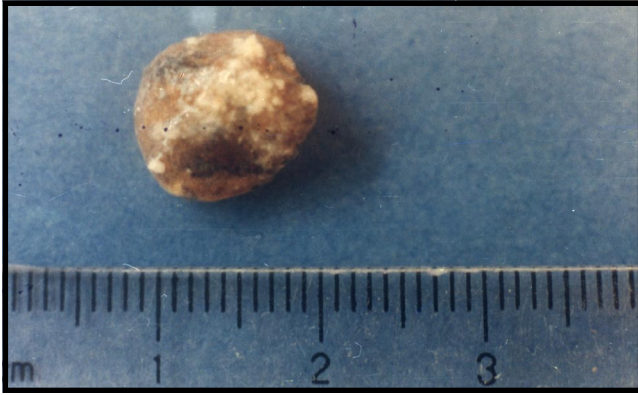
**Discussion.** Dystrophic calcification follows calcium deposition in injured, degenerative or dead tissues. Despite the normal serum calcium and phosphate in these patients, local anoxia and alkalinity are important factors. Calcification is frequently seen in abscesses, areas of parasitic infestation and tuberculous foci. Calcinosis localisata occurs in areas of trauma, the tendon insertion of the supraspinatus muscle being most frequently affected.<sup>1</sup> Fahal et al reported the first case of a patient with calculi in a fistula tract with a melon seed nidus, the composition of the stone revealed calcium phosphate and calcium carbonate.<sup>2</sup> In our patient, the composition of the stone was of both calcium phosphate and calcium oxalate. It is known that alterations in oxalate metabolism can cause renal calculi. Postmortem studies in patients with primary hyperoxaluria reported deposits of calcium oxalate in different tissues, myocardium and

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Received 12th August 2000. Accepted for publication in final form 10th October 2000.

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**Figure 1** - The calculus found within the fistula tract.

rete testis.<sup>3</sup> Several causes were reported as causative for oxalate deposition such as extensive small bowel disease and deficiency of either pyridoxine, glycine, magnesium or vitamin A.<sup>1</sup> None of these causes were evident in our patient and the most likely sequence would be a dystrophic calcification occurring at the site of a chronic inflammation.

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