

Introduction

Calciphylaxis is the ischemic ulceration of the skin due to metastatic calcification of the subcutaneous tissue and small arteries in patients with end-stage renal failure, hyperparathyroidism has been suggested to be a risk factor but some cases of calciphylaxis with normal or even low parathyroid hormone levels have been reported (*Fader and Sang, 1998*).

Calciphylaxis is a rare condition characterized by painful purpuric skin lesions, subcutaneous nodules and necrotic ulceration. The disorder occurs mostly in patients with end-stage renal failure on dialysis or after kidney transplantation associated with secondary or tertiary hyperparathyroidism (*Adreogue et al., 1981*).

High Ca x p products secondary to hyperparathyroidism of chronic renal failure, results in the deposition of crystals containing calcium phosphate in soft tissues and the tunica media of small to medium sized arteries and arterioles. This is known as metastatic calcification and can lead to ischaemic tissue necrosis (*Hafner et al., 1995*).

Although Selye et al. introduced the term “calciphylaxis” in 1962, the first cases that fit the definition of calciphylaxis from nonuremic causes (NUC) were reported in 1956 by Bogdonoff et al., (*Bogdonoff et al., 1956*).

The term “calciphylaxis” itself is a misnomer, since this term implicates an immune type reaction (*Coates et al., 1998*). A more accurate name is calcific uremic arteriolopathy (*Floege, 2004*).

The incidence of calcific uremic arteriolopathy is estimated to be approximately 4% in patients on dialysis and less than 1% in patient with CKD (*Rogers et al., 2007*).

Calciphylaxis is a potentially lethal disease, with a high mortality rate (60-80%) principally due to ischemic events and sepsis complicating secondary infection of the ulcers (*Don and Chin, 2003*).

Diagnosis of calciphylaxis require high index of suspicion in a patient with end-stage renal failure with typical skin lesions, as there are no specific laboratory tests. Skin biopsy is specific and can establish the diagnosis, but is not pathgnomonic (*Floege, 2004*).

Proximal calciphylaxis with lesions affecting the abdomen, thighs and buttocks carries a poor prognosis (63% mortality rate) compared to distal lesions (23% mortality rate) (*Hafner et al., 1995*).

Therapeutic options for calciphylaxis are limited, unsatisfactoray and essentially supportive, involving calcium and phosphate control, parathyroidectomy and local wound care (*Don and Chin, 2003*).