



SKIN MANIFESTATIONS OF INTERNAL DISEASE

## CALCIPHYLAXIS IN DAILY PRACTICE: DEAL WITH IT!

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**Background:** A 63-year-old-woman affected by end-stage-renal disease in hemodialytic therapy, polymyalgia rheumatica and autoimmune thyroiditis presented with a 3-months history of painful purpuric patches of both thighs. At clinical examination the entire lower limbs revealed the presence of asymptomatic subcutaneous hardened nodules. Blood examinations were performed in the suspicion of an autoimmune vasculitis but showed only a weak ANA positivity; high phosphorous and slightly elevated calcium circulating levels were found while coagulation factors were normal. A deep incisional biopsy was performed and documented calcium depositions both in soft tissues and blood vessels, configuring a diagnosis of initial calciphylaxis. In a few weeks clinical aspect of patches rapidly turned into initial ulceration. A multi-interventional approach was immediately started according with nephrologists, with hemodialytic sessions every day with sodium thiosulfate administration, surgical wound debridement and hyperbaric oxygen therapy.

**Observation:** Calciphylaxis is a rare and serious disorder also described as calcific uremic arteriopathy that commonly occurs in patients who have end-stage renal disease and on dialysis. It is characterized by calcifications of arterioles in dermis and subcutaneous tissues that develop skin ischemia and necrosis, mostly involving areas with greatest adiposity. An elevated plasma calcium, phosphate and chronic inflammation and autoimmune diseases may be involved in the pathogenesis. A poor prognosis characterized this disease with a high mortality rate in a few years.

**Key message:** A misdiagnosis is frequent in the early stage when typical clinical features are absent and a skin biopsy is necessary as soon as possible. A multi-interventional therapeutic strategy is described as more effective in the earlier stage of diagnosis with hemodialysis and intravenous sodium thiosulfate treatment and regulation of serum calcium, phosphorus associated with surgical treatment of lesions and hyperbaric oxygen.

