



2021 Annual Spring Virtual Meeting | Abstract Submission

Penile Calciphylaxis

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Calciphylaxis (or calciphic uremic arteriopathy) is an uncommon and severe vasculopathy that almost exclusively arises in the setting of end-stage renal disease and hemodialysis. While traditional calciphylaxis favors fatty areas of the abdomen and lower extremities, a less common and particularly severe presentation is calciphylaxis of the penis, which arises with calcification of the large and small penile arteries. We present a case of a 75-year-old male who presented to the emergency department with a 3-week history of progressive, severe pain and rash of the glans penis. Rash consisted of necrotic crust of the glans at the urethral meatus and white, circinate as well as hemorrhagic, purpuric patches diffusely on the proximal glans. His past medical history was significant for end-stage renal disease on peritoneal dialysis and giant cell arteritis. Punch biopsy of the glans penis revealed calcification of a medium-sized superficial arteriole, confirming the diagnosis of penile calciphylaxis. Therapeutic interventions were recommended, including transition to hemodialysis with initiation of sodium thiosulfate; however, the patient declined treatment and passed away one month later. Penile calciphylaxis develops rapidly and has very poor prognosis. Thus, interventions are most successful when disease is identified and treatments are initiated early. There is no standardized treatment regimen, and multidisciplinary planning, coordination, and intervention is warranted. In addition to diligent wound care and treatment of secondary infection, potentially helpful interventions include sodium thiosulfate administration, lowering of calcium-phosphate product, and possibly surgical excision.

1. Yang T, Want T, Chen M, et al. Penile calciphylaxis in a patient with end-stage renal disease: a case report and review of the literature. *Open Med.* 2018; 13:158-63.