Causes of Calcinosis Cutis
A 6.5-year-old, unvaccinated German shepherd was presented for acute hepatic and renal disease. A presumptive diagnosis of leptospirosis was made via serologic testing, and the dog was successfully treated. Approximately 2 months after recovery, the owners reported marked hair loss, compatible with telogen effluvium, over the dorsum and caudal legs. Hair loss continued, and affected skin became thickened and white papules developed. Skin biopsy revealed calcinosis cutis. The results of a low-dose dexamethasone-suppression test were normal. Over the next 30 days, the lesions gradually resolved with complete hair regrowth.

COMMENTARY: Calcinosis cutis is caused by calcium deposits in the skin and can be localized or generalized. It can be caused by percutaneous absorption of a calcium-containing substance, it can result from an illness that causes increased serum calcium and/or phosphate levels, or it can be “dystrophic.” Dystrophic cases involve normal serum calcium and phosphorus levels but some change occurs in the dermis that triggers calcium deposition; one cause is severe stress. Dystrophic calcinosis cutis secondary to high serum cortisol concentrations either due to hyperadrenocorticism or steroid administration is the most commonly encountered form. This case report highlights the fact that dystrophic mineralization in dermis can be caused by systemic diseases. This patient was suspected to have had a bacterial infection. There are 2 reported cases of calcinosis cutis in dogs with blastomycosis. Calcinosis cutis can also occur in young dogs with systemic illnesses.—Karen A. Moriello, DVM, Diplomate ACVD