Early lesions present
Hayashi
Other modalities to help suggest the diagnosis of
Erdel
Of importance, matrix GLA
(see inset for magnification)
Yerram
Yu
STS chelates calcium and is eliminated via
underlying laboratory abnormalities as well as sodium thiosulfate.
progressing to septicemia.
reaching 80% in some reports, and is usually due to secondary infection
this is controversial as the trauma of the biopsy may exacerbate the
formation, luminal obstruction and tissue infarction.
Recent reports suggest two phases in the development of Calciphylaxis, beginning with medullary
calcification and stenosis of small arteries followed by thrombus
CAHPS philosophy of this rare disease entity is evolving as the number of reported cases increases.
Risk factors associated with the disease include dialysis treatment, warfarin use, derangements in calcium-phosphate metabolism leading to an elevated
calcium-phosphorus product, hyperparathyroidism, diabetes, female gender.
Cautionary race, obesity and inflammatory conditions.
Our understanding of the complex pathophysiology of this rare disease entity is evolving as the number of reported cases increases. Recent reports suggest two phases in the development of Calciphylaxis, beginning with medullary
calcification and stenosis of small arteries followed by thrombus
Calciphylaxis is estimated to be 1-4% of patients with end-stage renal disease (ESRD).

### ABSTRACT
Calciphylaxis, also known as calcific uremic arteriolopathy (CUA), is a rare condition characterized by exquisitely painful necrotic ulcerations in patients with end-stage renal disease (ESRD) undergoing dialysis.1,2 Risk factors associated with the disease include dialysis treatment, warfarin use, derangements in calcium-phosphate metabolism leading to an elevated calcium-phosphorus product, hyperparathyroidism, diabetes, female gender, Caucasian race, obesity and inflammatory conditions.4,5 The understanding of the complex pathophysiology of this rare disease entity is evolving as the number of reported cases increases. Recent reports suggest two phases in the development of Calciphylaxis, beginning with medullary
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Calciphylaxis is estimated to be 1-4% of patients with end-stage renal disease (ESRD).

### INTRODUCTION
Calciphylaxis, also known as calcific uremic arteriolopathy (CUA), is a rare condition characterized by exquisitely painful necrotic ulcerations in patients with end-stage renal disease (ESRD) undergoing dialysis.1,2 Although the majority of patients with calciphylaxis are on either peritoneal dialysis or hemodialysis, there have been reported cases in patients without renal disease, referred to as non-uremic calciphylaxis.1,2 Risk factors associated with the disease include dialysis treatment, warfarin use, derangements in calcium-phosphate metabolism leading to an elevated calcium-phosphorus product, hyperparathyroidism, diabetes, female gender, Caucasian race, obesity and inflammatory conditions.4,5 The prevalence of calciphylaxis
Calciphylaxis is estimated to be 1-4% of patients with end-stage renal disease (ESRD).

### PATHOPHYSIOLOGY AND DIAGNOSIS
Our understanding of the complex pathophysiology of this rare disease entity is evolving as the number of reported cases increases. Recent reports suggest two phases in the development of Calciphylaxis, beginning with medullary
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### TREATMENT OPTIONS
Calciphylaxis treatment is multifaceted and involves wound care, pain control, treating underlying hyperparathyroidism as well as sodium thiosulfate.10 Wound care should aim to keep the lesions clean and prevent infection, although no specific dressings have been shown to be beneficial.17 Pain control is a difficult task in calciphylaxis patients and often requires narcotic pain medications. Fentanyl is preferred over morphine because morphine has been shown to promote hyperparathyroidism and further increase calcium and phosphate levels.14

**REFERENCES**

4. Togashi K, Hayashi M, Yamanishi T, Yada T, End-stage renal disease: Clinical features and pathogenesis of calciphylaxis. Kidney Int. 2018