Summary and Conclusion

Calciphylaxis is a rare and serious disorder characterized by systemic medial calcification of the arteries that leads to ischemia and skin and soft tissue necrosis.Prevalence of CUA has been reported as 4% in hemodialysis patients, and the incidence of this disorder may be increasing in patients with ESKD.Females are affected more often than males, with a female-to-male ratio of approximately 3:1. Although the disease may affect persons of any race, it appears to be more prevalent in whites. Calciphylaxis has been reported in individuals ranging in age from 6 months to 83 years.

Calciphylaxis is one of several types of extraskeletal calcification that may occur in patients with end-stage renal disease (ESRD). The term “calciphylaxis” itself is a misnomer, since this term implicates an immune type reaction amore accurate name is calcific uremic arteriolopathy. Hyperparathyroidism, vitamin D supplementation, hyper-phosphatemia, an elevated plasma calcium concentration, abnormalities of coagulation, and defects in inhibitors of mineralization all may play a role in the genesis of calciphylaxis.

The mortality rate of calciphylaxis is reported to be as high as 60-80%. The leading cause of death is sepsis from infected, necrotic skin lesions, although death due to internal organ failure has been reported. Calciphylaxis should be suspected in patients with ESRD and skin lesions characterized by painful, nonulcerating subcutaneous nodules or plaques, nonhealing painful ulcers, and/or necrosis, which are most commonly present in the thigh and areas of increased adiposity.

There are no specific diagnostic laboratory tests for calciphylaxis,

which is usually suggested by the characteristic ischemic skin lesions and their distribution. If there are no contraindications, It was recommend that the diagnosis be confirmed by skin biopsy, which shows arterial occlusion and calcification in the absence of vasculitic change. Bone scan and x-ray mammographic techniques are noninvasive diagnostic tools that can aid in the diagnosis.

A number of novel and experimental therapies have been evaluated in calciphylaxis. These include:

- In an experimental model, administration of bisphosphonate inhibited calciphylactic reaction in rats treated with sub-lethal doses of vitamin D.
- In a seires of five patients, hyperbaric ocygen therapy, which consisted of 25 to 35 90-minute sessions at 2.5 atmopsheres, resulted in complete healing of extensive necrotic ulcers in two individuals.
- A single-center study reported the successful use of prednisone in patients with non-ulcerating plaques. Among 14 patients without ulcers and an increased risk of infection, prednisone resulted in stabilization or improvement in 11.
- Leg revascularization was attempted in two patients with calciphylaxis, but the results were poor.