

Under the Necrosis, A Solid Clinical Diagnosis: A case of Non-Uremic Calciphylaxis

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Learning Objectives

1. Consider the diagnosis of non-uremic calciphylaxis (NUC) for non-healing skin ulcers.
2. Discuss diagnostic tools for calciphylaxis in challenging clinical cases.

Background

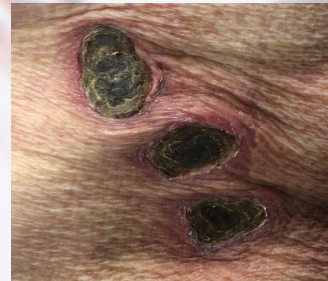
- Non-uremic calciphylaxis (NUC) is a rare diagnosis with distinct pathophysiology and prognosis from uremic calciphylaxis.
- Presents as non-healing indurated plaques with central necrosis and surrounding violaceous hue.
- Differential typically includes pyoderma gangrenosum and warfarin skin necrosis.

Case Presentation

77 yo woman with a history of CVAs on warfarin, CKD stage III, polymyalgia rheumatica on prednisone, and T2DM.

Presented with several weeks of worsening, painful dark purple ulcers on her bilateral inner thighs without drainage or purulence.

Normal vitals; labs showed WBC to 15.8, normal PTH, and normal calcium.



Diagnosis

- Clinical suspicion
- Surgical Biopsy
- Bone scintigraphy



Treatment

- Stop warfarin
- IV sodium thiosulfate
- Treat secondary infection

Clinical Course

No improvement with IV antibiotics.

Biopsy: No evidence of PG, warfarin skin necrosis, or calciphylaxis.
Culture: polymicrobial organisms.

Bone scintigraphy: Increased tracer uptake at the areas of ulceration, consistent with NUC.

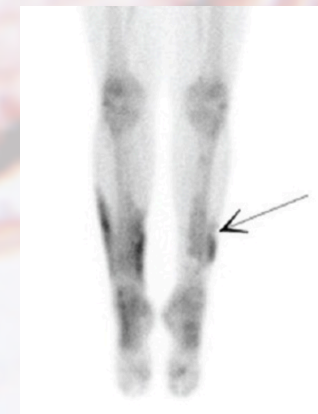


Image Credit: Martineau et al (2)

Background: Calcified blood vessel with Von Kossa stain.

Discussion

- Non-uremic calciphylaxis (NUC) is rare and requires high level of suspicion.
- Risk factors include female gender, warfarin use, steroid use, liver disease, hyperparathyroidism, malignancy, and obesity with or without CKD.
- High false negative rate based on lab pathology (4).
- Bone scintigraphy can be used to aid diagnosis - sensitivity 89% and specificity 97% (3).

References

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- (5) Yung-Hsu, W, Bhutani T, Kornik R, Pincus LB, Mauro T, Rosenblum MD, Fox LP. "Warfarin-Associated Nonuremic Calciphylaxis." *JAMA Dermatol* 2017 March; 153(3): 309-314.