MARTORELL HYPERTENSIVE ISCHEMIC LEG ULCER: A CASE OF MISTAKEN IDENTITY

Mayghen Rains, RN, CWS/Anil S. Matta, M.D, MPH/Frank Aviles, Jr., PT, CWS, CLT-LANA
Natchitoches Regional Medical Center Comprehensive Wound Care Center

Introduction

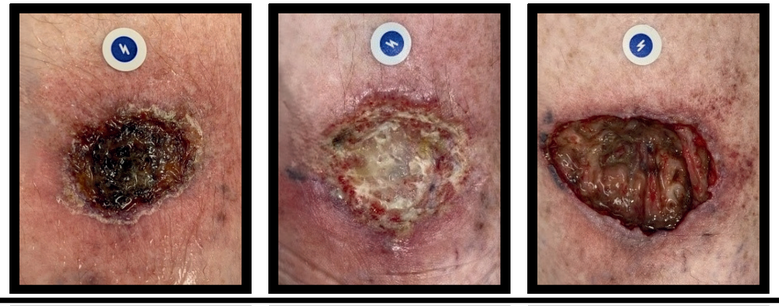
Martorell Hypertensive Ischemic Leg Ulcer (HYTILU) represents a distinct pattern of nonuremic caliciphylaxis. Ischemic subcutaneous arteriolosclerosis is the hallmark of the Martorell HYTILU. Results from superficial “punch” biopsies are often misleading and vague, therefore histological confirmation is imperative for the diagnosis of Martorell HYTILU. Confusing Martorell HYTILU with entities such as Pyoderma Gangrenosum (PG) or vasculitis can be harmful as the disease processes require very different treatment plans, including immunosuppressive therapy, which poses a risk of infection and sepsis.

Background

45 year old female presents to the wound care clinic with a wound to the left lower extremity. Patient reported trauma as the etiology and started as a small black “bump” that gradually worsened. Past medical history includes morbid obesity, severe obstructive sleep apnea, and uncontrolled hypertension, for which the patient had not been following with her primary care physician. Social history includes 1 pack per day smoking since age 12. The rest of the history was unremarkable. The exam of the wound on presentation showed eschar and extremely tender to palpation. Laboratory tests showed elevated inflammatory markers (ESR & CRP). Rheumatology workup was negative. Imaging studies were negative. ABI, TCOM, and CTA were within normal limits. Initial pathology obtained with a punch from the wound margin showed nonspecific changes, concern for stasis dermatitis vs PG.

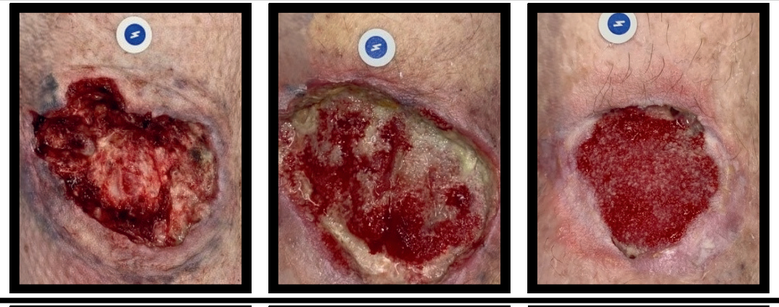
Pre-Diagnosis

Patient was started on aggressive treatment with concern for PG. Intralestional Kenalog, IV Solumedrol followed by 7 weeks of tapering prednisone, cyclosporin and minocylcine. There was worsening pain and the wound progressively worsened in size and overall appearance following immunosuppressive therapy. Subsequently, a wedge biopsy was obtained at the edge of the wound and sent to dermatopathology for evaluation. Other failed therapies included NPWT and 2–4-layer compression. (Fig 1-3)



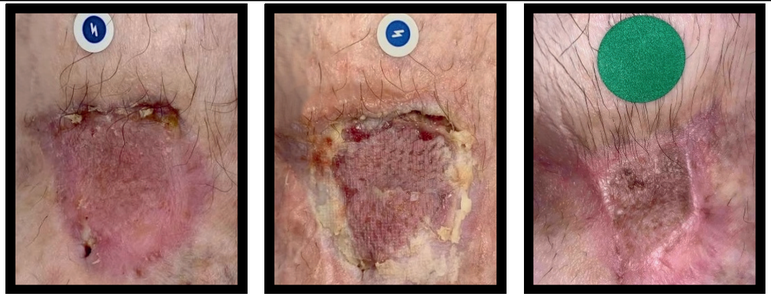
Post-Diagnosis

Results from the wedge biopsy revealed marked hyperplastic media of mid-sized arterioles with complete occlusion of lumen and calcium deposition, suggestive of Martorell HYTILU. Steroids were rapidly tapered, calcium channel blockers were initiated for adequate blood pressure control, extensive debridement was performed, NPWT was applied to aid in wound bed granulation and preparation for subsequent split thickness skin grafting. Four-layer compression was also utilized to manage swelling. The wound started to show dramatic improvement with the above interventions. (Fig 4-6)



Post Skin Grafting

When appropriate, patient underwent split thickness skin grafting along with NPWT and 4-layer compression with eventual healing. (Fig 7-9)



Conclusion

This case highlights an atypical presentation that could have been misdiagnosed as other conditions, such as Pyoderma Gangrenosum, potentially delaying appropriate treatment. Obtaining a thorough medical history and appropriate diagnostics are crucial to reach an accurate diagnosis. Recognizing Martorell Hypertensive Ischemic Leg Ulcers is essential for timely intervention and optimal wound progression.