



# Wound Sleuth

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**T**his 42-year-old female had been diagnosed with ulcerated necrobiosis lipoidica diabetorum (NLD) in her 20s and had continual long-term management problems with her leg ulceration. Her diagnosis had been based on her clinical presentation of non-healing leg ulcers in association with juvenile diabetes. In addition, she had a biopsy done that was reported as showing histologic features compatible with this diagnosis.

The clinical presentation in Figure 1 shows non-healing ulcers in an edematous leg.

However, additional sleuthing revealed a more complete story. Doppler ultrasounds were subsequently taken that showed venous incompetence. After a long trial of compression stockings in addition to better glycemic control, her ulcers eventually healed and she has been ulcer-free for several years.

## Learning points

Although the diagnosis of NLD had been entertained, the biopsy findings of many leg

ulcers can be very non-specific and compatible with any variety of leg ulcer etiologies. Therefore clinico-pathologic correlation is always required.

Always suspect venous incompetence in any leg ulcer, as stasis ulcers are the most common etiology for leg ulceration. Doppler ultrasounds can help narrow down the cause. Certainly this individual's diabetes could significantly contribute to non-healing, but the diagnosis of necrobiosis lipoidica diabetorum has a distinct clinical presentation and histologically displays vasculitis. Necrobiosis lipoidica is clinically characterized by yellowish patches and plaques with superficial blood vessels and cutaneous atrophy. Occasionally they may ulcerate, but this is generally uncommon.



**Figure 1.** Ulcerated lower leg



**Figure 2.** Leg during healing

Sustained and continuous compression therapy was an important aspect in achieving final wound healing in this individual. 🖐️

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