A Growing Wound after Sural Nerve Biopsy: A Quiz

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A 78-year-old man, currently under investigation for mononeuritis multiplex, was referred from the department of neurology due to 3 painful lesions on his lower limb. The wounds had a spontaneous onset 3 months before and worsened after using tight footwear.

Clinical examination showed an undermining violaceous wound border, lack of healing and severe tenderness at site of ulceration (Fig. 1).



Fig. 1. Clinical aspect before sural nerve biopsy.

Systemic treatment with prednisolone 75 mg/day and topical tacrolimus ointment 0.1% for the wound edges was started.

Despite the existing wound, a biopsy of the left sural nerve was performed 5 days after and the wound area increased almost immediately (Fig. 2).

What is your diagnosis? See next page for answer.



Fig. 2. Wound area a few days after sural nerve biopsy.

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Diagnosis: Pyoderma gangrenosum

Before the sural nerve biopsy, the patient was treated with prednisolone 75 mg/day and tacrolimus 0.1% ointment for the wound edges, which led to clinical improvement. Nevertheless the biopsy led to a pathergy phenomenon. He continued treatment with prednisolone 75 mg daily and after one week clinical improvement was seen.

The pathergy phenomenon is a typical finding in pyoderma gangrenosum. It was first observed by Brunsting et al. in 1930

(1). Today it is 1 out of 8 minor criteria in the diagnosis of pyoderma gangrenosum (2).

References

- Brunsting AL, Goeckerman WH, O'Leary PA. Pyoderma gangrenosum: clinical and experimental observation in five cases occuring in adults. Arch Dermatol Syphilol 1930; 22: 655–680.
- Maverakis E, Ma C, Shinkai K, Fiorentino D, Callen JP, Wollina U, et al. Diagnostic criteria of ulcerative pyoderma gangrenosum: A Delphi consensus of international experts. JAMA Dermatol 2018; 154: 461–466.