A Case of Pyoderma Gangrenosum After Long Saphenous Vein Harvesting

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INTRODUCTION

Pyoderma gangrenosum is a rare cause of ulceration whose aetiology is poorly understood. Classically it presents with one or more painful ulcers in the lower leg with violet coloured undermined edges. In the post-operative patient it may be easily confused with wound infection. We present a case of pyoderma gangrenosum occurring after saphenous vein harvesting.

CASE REPORT

A 74-year-old man presented with a painful left leg ulcer 48 hours after open harvesting of the left long saphenous vein during cardiac surgery. The vein harvest site showed no immediate sign of breakdown. Medical history included diabetes mellitus, hypertension, ischemic cardiomyopathy, and previous peptic ulcer, and medication included Novorapid, Novomix, Aldactone, Lopresor, Cardioaspirin, and Lasix.

Within 1 week of the procedure, the lesion now overlying the distal end of the left saphenous vein-harvesting site measured 7 × 5 cm. The ulcer had a patchy necrotic base and well-demarcated violet-coloured edges with surrounding erythematous, indurated skin. Review of the clinical history revealed previous delayed wound healing. The diagnosis of pyoderma gangrenosum was confirmed by histological analysis.

DISCUSSION

This case highlights the importance of the pre-operative medical history in identifying patients at risk of pyoderma gangrenosum.

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Healing is slow and progresses centrally from the wound edge, leading to an atrophic, cribriform, pigmented scar. Up to 50–70% of cases have been associated with systemic disorders, including inflammatory bowel diseases, rheumatoid arthritis and hematologic disorders such as acute myeloblastic leukaemia, myelodysplastic syndrome, “hairy cell” leukaemia, myelofibrosis, and IgA monoclonal gammopathy. Our patient did not present with any of the comorbidities classically associated with pyoderma gangrenosum.

In the present report, the lesion was temporally related to surgical intervention, suggesting a pathergy reaction as the triggering factor. Pyoderma gangrenosum has been described following a number of surgical interventions including pacemaker implantation, caesarean delivery and breast surgery. Pyoderma gangrenosum should therefore be considered as a differential diagnosis for post-operative wound infection. In this case a detailed review of the case history revealed a background of delayed wound-healing process after two previous benign nevus excisions.

Pyoderma gangrenosum following harvesting of the long saphenous vein has been reported previously, but remains an extremely rare condition. As in this case, individuals at risk of developing a pathergy reaction can be identified by obtaining a detailed medical history. Early diagnosis of pyoderma gangrenosum is essential in order to avoid significant morbidity. It is of particular importance to differentiate pyoderma gangrenosum from diabetic foot ulcer as surgical debridement will exacerbate the condition.

In conclusion, the case described highlights the importance of an accurate medical history before undergoing surgical procedures in order to identify patients at risk of pyoderma gangrenosum secondary to pathergy reaction.

CONFLICT OF INTEREST
None.

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REFERENCES