Pyoderma gangrenosum complicating bilateral mammaplasty

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SUMMARY. Pyoderma gangrenosum (PG) is an idiopathic necrotising cutaneous disorder. It is associated with systemic diseases like inflammatory bowel disease, monoclonal gammopathy, arthritides and haematological malignancy. PG occurring at sites of trauma, a phenomenon called pathergy, is well described. One of the manifestations of pathergy is PG occurring at sites of surgery. We describe a case of PG at sites of reduction mammaplasty and review the literature so far. © 2000 The British Association of Plastic Surgeons

Keywords: pyoderma gangrenosum, mammaplasty.

Case report

A 34-year-old Caucasian patient underwent bilateral mammaplasty in December 1992. Two weeks after surgery, wounds around her nipples broke down. Retained suture material was suspected and surgical debridement was undertaken; histology of the excised specimen showed marked active chronic inflammation with focal micro-abscesses and occasional foreign body giant cells. The wounds failed to settle over the next one and a half years despite repeated courses of antibiotics and conservative wound care. She was then referred to the Dermatology Unit for further evaluation.

She was medically fit and was on thyroxine supplements for hypothyroidism. On physical examination, she had ulcerated areas around both the nipples (Fig. 1). No significant organisms were found on culture of the wound swabs. Further biopsy from the edge showed granulation tissue with ulceration; no foreign body granuloma was identified. Full blood count showed microcytic hypochromic anaemia (Hb of 10.3 g/dl) with a low serum ferritin (9 ng/ml); electrolytes, thyroid function tests and liver function tests were all normal. Protein electrophoresis showed a mild rise in IgM to 3.68 g/l without any evidence of multiple myeloma. Anti-nuclear factor and anti-parietal cell antibodies were positive at a titre of 1:80 each. Serum B12 was subsequently found to be 88 pg/ml. Pyoderma gangrenosum (PG) was suspected and topical clobetasol propionate 0.05% (Dermovate®) was prescribed. The ulcers improved remarkably within weeks. Six months later she was left with scarring around her nipples (Fig. 2). She has not had any recurrence of PG in the last 5 years.

Discussion

PG is associated with trauma and surgery. Two cases of PG complicating reduction mammaplasty have been previously reported in the literature. Clugston et al reported that PG occurred about 6 weeks after surgery; the only abnormality detected on investigation was a raised IgM fraction on serum protein electrophoresis. The diagnosis was made 28 months postoperatively and was treated with intralesional triamcinolone. The lesions healed over 2 months. Grau Salvat et al reported another case where PG occurred 4 days after surgery; α-1 and α-2 globulins were found to be elevated on further investigation. Diagnosis was made about 2 weeks after surgery. She required oral
Pyoderma gangrenosum following breast reconstruction

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SUMMARY. Pyoderma gangrenosum is an unusual cause of skin necrosis following surgery, particularly in those without an associated systemic condition. There have been reports of the condition in this context but not in relation to breast reconstruction. We present a case of pyoderma gangrenosum following latissimus dorsi flap reconstruction of a breast.

Keywords: pyoderma gangrenosum, latissimus dorsi flap, breast reconstruction.

Breast reconstruction with a latissimus dorsi muscle flap in combination with a prosthesis is an aesthetically satisfactory and well-accepted procedure. Complications are rare and usually minor, but problems of ischaemia and necrosis may occur if the safe boundaries of flap design are overstepped. Radiotherapy alters the compliant nature of the tissues although recent evidence suggests that it does not interfere with vascularity. Infection is a rare but serious problem which if confined to the skin can usually be successfully managed with antibiotics, but if the implant is involved necessitates the removal of the device and this manoeuvre should bring about resolution of the condition.

Pyoderma gangrenosum is an uncommon cause of skin necrosis, the aetiology of which is uncertain. It has been previously reported following breast surgery, but there has been no previous report of pyoderma gangrenosum as a cause of necrosis following breast reconstruction.

Case report

A 51-year-old lady with adenocarcinoma of the right breast and in situ carcinoma of the left breast underwent bilateral mastectomy in March 1995. Postoperative radiotherapy was given to the right side. A left breast reconstruction was carried out in October 1997 using a sub-pectoral silicone implant (Fig. 1). She was otherwise in good general health with no history of systemic illness, allergy or auto-immune disease.

On 6 August 1998, she underwent a right side reconstruction using a pediced latissimus dorsi flap and a tissue