SKIN GRAFT IN PEMPHIGUS

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The use of systemic corticosteroids has markedly improved the clinical course and prognosis of patients suffering from pemphigus. There are, however, complications, such as osteoporotic vertebral collapse and reactivation of quiescent tuberculosis, which have to be carefully considered and watched for, when corticosteroids are prescribed.

Opinions have differed as to whether patients on corticosteroids would show delayed wound healing. Certainly this doubt still exists in the minds of medical men and surgeons. The skin of the patient suffering from pemphigus is particularly fragile, as evidenced by Nikolsky's sign of ready separation of the superficial layers of the epidermis under extrinsic pressure. The fear of trauma therefore always exists in the mind of the patient and his clinician. The magnitude of the problem is increased by the suspicion that wound healing may be delayed whenever a patient is on long-term corticosteroid therapy.

It is the purpose of this paper to report on a skin graft in a patient whose pemphigus was controlled by corticosteroids, and who suffered a traumatic avulsion of the skin of the leg.

CASE REPORT

H.C. (White male, 52 years) has suffered from histologically proved pemphigus of the Senear-Usher type for 5 years. His lesions have involved the mucous membrane of the mouth and various areas of the skin. He was reasonably well controlled down the years with corticosteroid therapy.

While on 12 mg. of methyl-prednisolone daily, his right leg was caught in a mechanical pedestrian gate at a level crossing on 12 March 1963, causing an area of degloving on the antero-lateral aspect of the lower leg involving an area of about 4 inches × 4 inches. The degloving extended down onto deep fascia but left the deep fascia intact over the muscles. Proximally a big triangular flap of skin was still attached but was almost fully devitalized. Tetanus toxoid was given and ½% of 'carbocaine' without adrenaline was infiltrated into the edges of the degloved area and also into an area of about 8 inches × 8 inches on the antero-lateral aspect of the right thigh. The edges of the degloved area were trimmed until free bleeding was observed. The devitalized triangular piece of skin was removed.

A split-thickness graft 0·028″ thick was cut from the right thigh with an electric dermatome. The graft was kept in position on the recipient area by suturing along the edges with 4-0 black silk. These sutures were left long and tied over a bolus of cottonwool. A below-knee plaster-of-paris cast was applied. The donor area was dressed with tulle gras and gauze

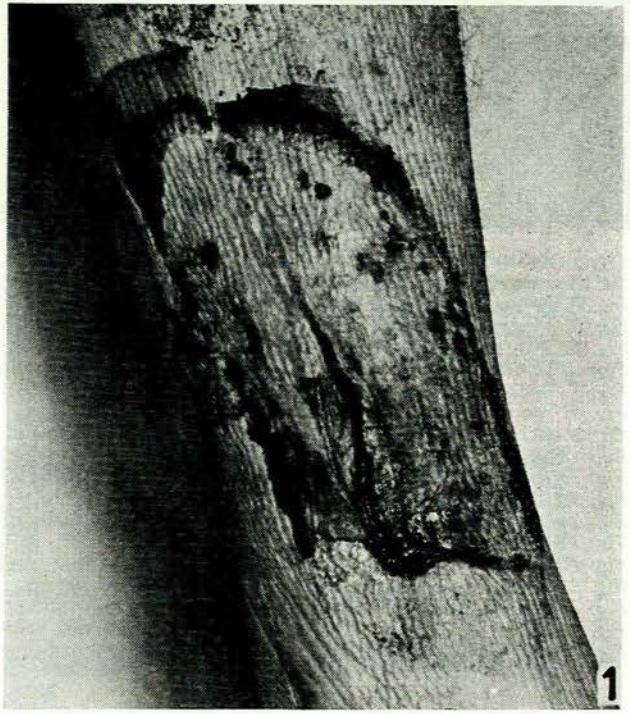

Fig. 1. A 100% skin-take was obtained.

soaked in acriflavine emulsion. After 72 hours the outer layers of the dressing on the donor area were removed and 'alficetyn' powder was applied twice daily. The donor area healed completely in 10 days without scarring or sepsis. The dressing on the grafted area was changed on the 12th day and the sutures removed. There was a 100% skin-take (Fig. 1). Another below knee plaster-of-paris cast was applied and the dressings were again changed after 5 days. The patient was strictly confined to bed for 20 days postoperatively.

During the period of rest, the patient had an exacerbation of his skin lesions on his back and his dose of methylprednisolone was increased to 24 mg. daily before these fresh lesions were brought under control. This was gradually reduced and he was discharged on 17 April 1963 on a maintenance dose of 16 mg. daily. Fig. 2 illustrates the grafted area 3 months later.

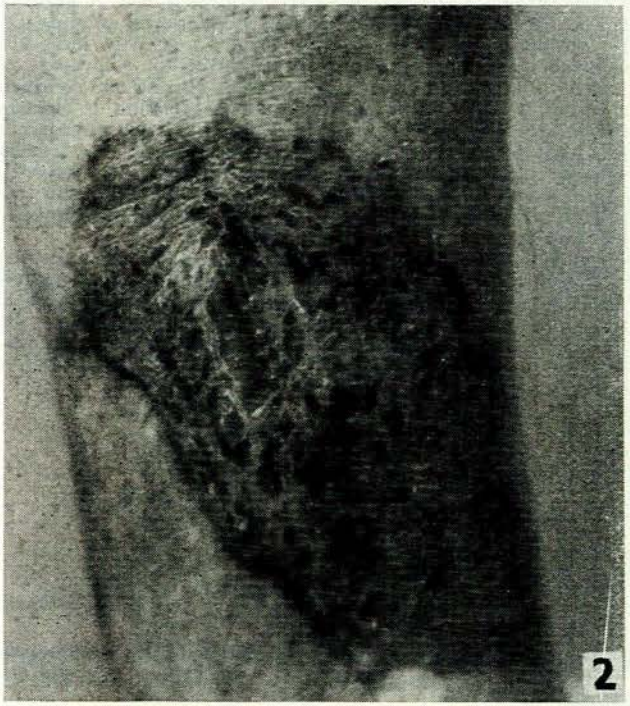

Fig. 2. The grafted area after 3 months.

DISCUSSION

The only comparable case in the available literature was reported by Ziprowski and Krakowski[1] whose graft resulted in a 100% take, but donor site healing was retarded by sepsis. Stimulated by this patient, they performed successful experimental grafts in 2 patients whose pemphigus was active and being treated with prednisolone.

The interesting finding in our case was the excellent healing of the donor site in spite of the exacerbation of his pemphigus during this period of stress (Fig. 3). Bellone and Leone's[2] experimental findings *in vitro* suggest that

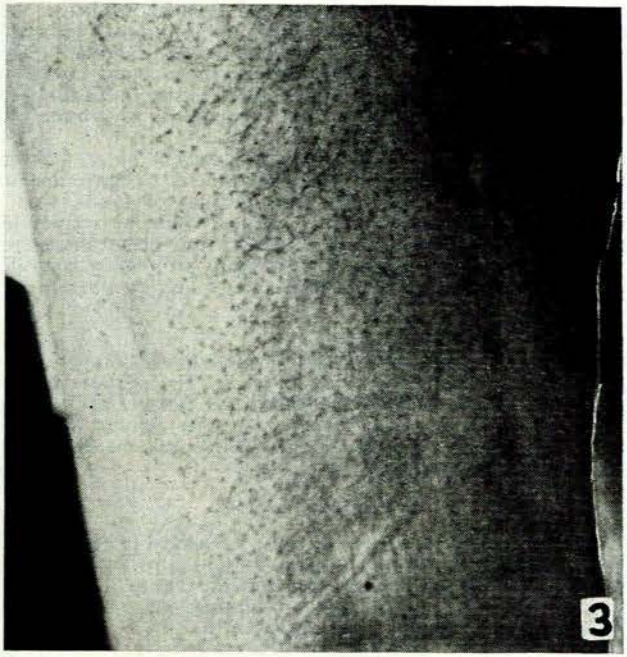

Fig. 3. Excellent healing of donor site in spite of exacerbation of pemphigus.

pemphigus serum stimulates skin culture better than normal serum, and that one may therefore expect better results in grafting pemphigus patients than patients with normal skin, in spite of the possible retarding effect on healing by the steroid therapy.

SUMMARY AND CONCLUSIONS

A successful skin graft in a patient on treatment with corticosteroids for pemphigus is reported in the hope that practitioners will not be unduly pessimistic when confronted with a similar situation.

We wish to thank Dr. J. G. Burger, Medical Superintendent of Groote Schuur Hospital, for permission to publish, and Dr. R. Lang, Head of the Department of Dermatology of Groote Schuur Hospital, for helpful criticism and guidance.

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2. Bellone, A. G. and Leone, V. (1957): Excerpta Med. Dermat. and Vener., **11**, No. 8, 121.