'Foamotomy' as an aid for skin graft conformity

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Background

Techniques of skin graft fixation have been reported extensively.^{1,2} For grafts on complex surfaces, stabilisation may be challenging.² We describe a simple modification of the well known foam tie-over, which permits excellent dressing contouring and conformity to topographically difficult wounds. We call this technique the 'foamotomy'.

Technique

A foam impression of the wound is made and cut to fit the defect. A blade is used to make slits at regular intervals along the foam (Fig 1) but not all the way through. The skin graft is secured using the surgeon's preferred method. A non-adherent primary dressing is applied, followed by

Figure 1 Scalpel used to make regular slits extending only partially through the foam

Figure 2 Foam contours precisely to the defect

the foam, keeping its uncised side in contact with the primary dressing. The foam will contour precisely to the wound (Fig 2).

Discussion

This technique uses the principle of release of interlocking stresses, described in relation to cartilage sculpting in prominent ear correction.^{3,4} The incisions allow easy conformity, without warping or 'bubbling'. They are not intended to increase pressure over the graft. In fact, on convexities, pressure at some points may actually be decreased but the significance of this in relation to graft take is dubious.⁵ Criss-cross incisions may provide additional biaxial and spherical conformity. This technique is simple and effective, especially on complex anatomical surfaces as experienced in necrotising fasciitis and extensive burns.

References

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