New donor-graft clamping block

D. C. GIBBS

Corneo-Plastic Unit, Queen Victoria Hospital, East Grinstead, Sussex

There are many methods of cutting lamellar grafts from donor eyes, ranging from precision planing with an electric microkeratome to holding the cornea between finger and thumb and slicing it with a razor blade. The usual way is to grip and steady the globe by a swab wrapped around it and to fashion the donor disc with trephine and knife or dissector.

When fresh eyes are not available, as is frequently the case in developing countries, it may be necessary to resort to corneo-scleral discs preserved in 95 per cent glycerol. Although dead, these serve for tectonic and even optical procedures provided they are lamellar; but how to hold such a disc and work upon it accurately is something of a problem.

To overcome it, a donor-graft clamping block has been designed. Being quite heavy, it provides a stable working surface. It is non-reflective, and its dome is moulded as the posterior surface of the cornea and scleral shoulder. Thus, a corneo-scleral disc, provided the scleral rim is wide enough, can be clamped firmly down upon the block and is ready for cutting in the usual way (Figs 1 and 2). Trapped air-bubbles can easily be expressed before the screws are tightened and the rigidity of the system compared with the elasticity of the normal eye is no great disadvantage after a little practice.

This clamping block may also be helpful in hand-cutting an irregularly-shaped donor lamellar graft; for example, to patch the defect caused by removal of a Mooren's ulcer or pterygium. Unlike lighter and less stable devices, it can be used in conjunction with an operating microscope.

FIG. 1 *Corneo-scleral disc about to be placed on dome. The clamp to be placed over the disc is shown to the right.*

FIG. 2 *Disc clamped in position ready for cutting*

I wish to thank Mr. T. A. Casey for facilities to develop this instrument, Mr. G. A. Sorrell for making the original cast in dental cement, Mr. T. H. Tarbuck for reproducing it in metal, and Mr. P. Broadbery for the photographs.

I am grateful to Mr. J. H. Dobree for using the prototype in Khartoum and especially to my colleagues at Kitwe Central Hospital, Zambia, where the difficulty of working with glycerol-preserved discs led to this idea.

The manufactures are Dixey Instruments Ltd., 19 Wigmore Street, London.

Bibliography

BARRAQUER, J. I. (1972) *Ann. Ophthal.*, **4**, 437

KING, J. H., CHAVAN, S. B., and FURNESS, C. W. (1958) *Trans. Amer. Acad. Ophthal. Otolaryng.*, **62**, 132

PAUFIQUE, L., and CHARLEUX, J. (1972) *In* "Corneal Grafting" ed. T. A. Casey, p.137. Butterworths, London