A SIMPLE METHOD OF INSERTING AMNIOTIC MEMBRANE GRAFTS INTO THE CONJUNCTIVAL SAC*

BY

C. MAXWELL SHAFTO

House Surgeon to the Royal Eye Hospital, London

The treatment of chemical burns of the conjunctiva with amniotic membrane is now widely used. A simple and quick method of insertion saves a patient with an already acutely tender eye much discomfort.

An amniotic membrane graft is required to separate two raw surfaces of conjunctiva and prevent the formation of symblepharon. A method is, therefore, needed to hold the graft well into the affected fornix. With this in view Mr. A. J. Cameron suggested inserting a graft into the inferior fornix by means of one double-armed suture, passed through the edge of the graft into the extreme limit of the inferior fornix and out through the skin of the cheek. From this suggestion has been evolved the following technique, which has been found satisfactory in over thirty cases.

Technique

(1) The eye is cocainized with 4 per cent. cocaine drops.

(2) Two small injections of 5 per cent. procaine are given into the skin overlying the affected fornix. (Fig. 2, A and B.) This has been found of value as

the patient is less apprehensive of a prick on the skin of the face at this stage than later when he knows that something is being done to his already painful eye.

(3) The amniotic membrane is folded into a shape that will comfortably fit into the fornix and at the same time cover the damaged area of conjunctiva.

* Received for publication March 18, 1950.
(4) A double-armed suture is then passed through one edge of the graft as shown in Fig. 1.

(5) If the graft is to be inserted into the lower fornix it is first laid on a sterile towel on the forehead. The lower lid is pulled down with the thumb of the left hand, and one needle is passed through the extreme angle of the lower fornix and out through the skin. This procedure is then repeated, the second needle being brought out at the point B (Fig. 2).

![AMNIOTIC GRAFT](image)

FIG. 2.

(6) The needles are then passed through a piece of rubber tubing of appropriate length and tied, thus drawing the graft well down into the fornix. If the graft tends to wrinkle it is smoothed into position with a squint hook.

(7) Finally an upper-lid suture is inserted to close the eye over the graft and is kept in position for 48 hours by strapping applied to the cheek.

This method can be appropriately modified to place a graft in the upper fornix or to any other part of the conjunctiva that requires protection. It requires only one suture which can be inserted quickly and painlessly, at the same time holding the graft well into the angle of the fornix where it is most needed.