A SIMPLE OPERATION FOR PTERYGIUM*

BY

T. B. RANKINE

General Hospital, Benin, Western Nigeria

It is generally accepted that simple excision of pterygium is an unsatisfactory procedure. Better results are obtained with transplantation operations—into the fornix conjunctivae or behind the caruncle. Still more satisfactory is the operation described by d’Ombrain (1948), in which the subconjunctival element of the pterygium is excised along with the epithelial portion of the head and neck and 2 mm. of the body, a 4-mm. strip of sclera being left denuded of conjunctiva in order to allow epithelialization of the cornea to take place before the conjunctival blood vessel can encroach upon it.

In practice, however, I have found certain objections to the d’Ombrain operation:

- (i) The subconjunctival dissection can be very difficult to perform satisfactorily, particularly in trachomatous patients with a shrunken vascular conjunctiva.
- (ii) It may also be difficult to leave an adequate zone of denuded sclera. This I have found particularly in Chinese patients who have small palpebral fissures and relatively enophthalmic eyes.
- (iii) Factors such as these, associated with the trauma inseparable from dissection, tend to produce a proportion of cases in which a rather vascular conjunctival scar and a more or less marked degree of corneal vascularization render the cosmetic result somewhat disappointing.

For some time now I have employed a procedure which, I think, makes the best both of transplantation and of the d’Ombrain method.

(1) Anaesthesia with cocaine or Xylocaine drops is supplemented by 1 ml. 2 per cent. Xylocaine injected deep to the pterygium and the caruncle.

(2) The pterygium is dissected free from the cornea and sclerotic in the manner described by d’Ombrain, but the upper and lower conjunctival incisions are carried medially as far as the plica. I prefer to do the corneal dissection centrifugally rather than centripetally so that the knife is not obscured by the vascular pterygium. The body of the pterygium having been freed from the episcleral tissue, scissor spreading separates it from the

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tissue overlying the medial rectus insertion. The head and neck of the pterygium are excised but the subepithelial dissection of the body is not done. Instead, the truncated pterygium is retroflexed behind the caruncle by means of a mattress suture of No. 1 silk passed through its tip and brought out just medial to the caruncle.

(3) A rather large, quadrilateral area of bare sclerotic remains, being bounded by raw conjunctival edges above and below and by the epithelial surface of the retroflexed pterygium medially. Two fine silk sutures are passed from before backwards through the pterygial border immediately above and below its mid-point. These are then passed through the upper and lower (conjunctival) borders at points just sufficiently lateral to their medial extremities to allow approximation of the conjunctival edges at the centre of the pterygial border. A smaller, triangular area of bare sclerotic now remains, bounded by raw conjunctival edges above and below.

(4) Post-operative dressings incorporate a corticosteroid eye ointment. The eye is kept bandaged until the stitches are removed on the 6th day.

Occasionally a small granuloma forms at the site of apposition of the conjunctival borders. This is always pedunculated and is easily removed with a snip of the scissors, the final cosmetic result being unimpaired.

Summary

An operation is described which combines the principal advantages of retrocaruncular transplantation and d'Ombrian's pterygium operation.

REFERENCE

D'OMBRAIN, A. (1948). *Brit. J. Ophthalm.*, **32**, 65.