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# OPERATIVE TREATMENT OF SEVERE CICATRICIAL ECTROPION*†

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## Case Reports

**Case 1.**—Ectropion of the right upper lid developed because of contraction of scar tissue in association with a fistula of the frontal sinus in a patient with chronic frontal sinusitis with a sequestrum (Fig. 1). This is a rare condition and Duke-Elder (1952) mentions only one report of such a case, that of McLeod and Lux (1936). This patient was treated by the technique of Wheeler (1936) as follows:

(*a*) The scar tissue was excised to release the lid so that it assumed its normal position against the globe.

(*b*) The upper and lower lids were united by means of two tarsorrhaphies.

(*c*) An elliptical full-thickness skin graft was taken from the contralateral upper lid and anchored in the recipient bed.

The lids remained closed for 3 months (Fig. 2), and when healing was complete and there was no longer any risk of contracture in the grafted area, the tarsorrhaphies were opened (Fig. 3).

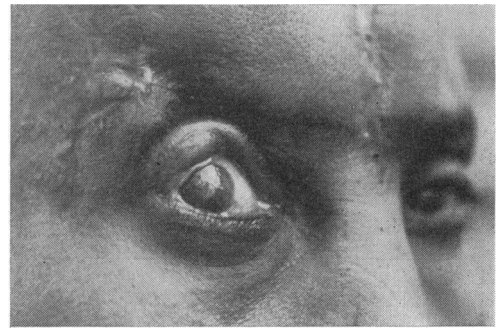

FIG. 1.—Close-up of ectropion, Case 1.

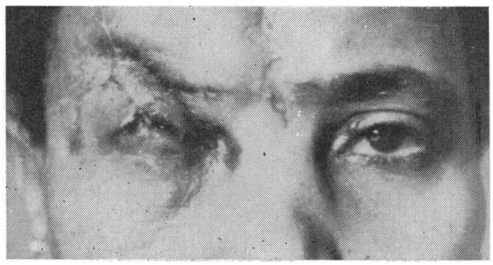

FIG. 2.—Appearance before tarsorrhaphies were opened, Case 1.

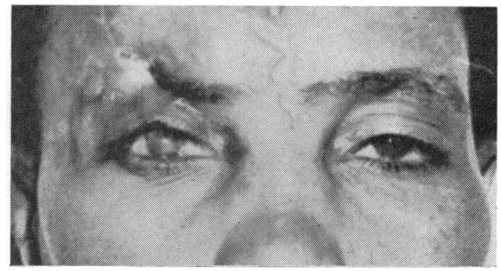

FIG. 3.—Post-operative result, Case 1.

It is true that repair of cicatricial ectropion by a free skin graft is best effected with palpebral skin, but the involvement of both lids forces us to use skin from another source. Some extensive and deep scars involving both lids are caused by the "treatment" administered by itinerant quacks who burn the lids with chemicals or red-hot metal.

**Case 2.**—The upper and lower lids were involved in a case of this kind (Fig. 4, opposite). One large split-skin graft was taken from the medial aspect of the arm. Fig. 5 (opposite) shows the appearance after operation and Fig. 6 (*a*, *b*) the appearance with eyes open and closed one month after the tarsorrhaphies were opened.

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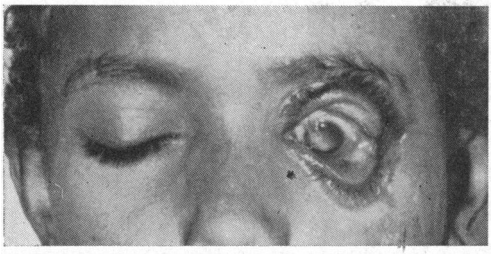


FIG. 4.—The patient is unable to close the affected eye, Case 2.

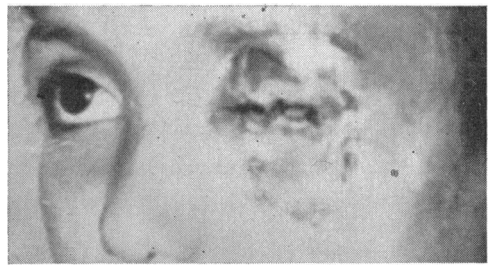
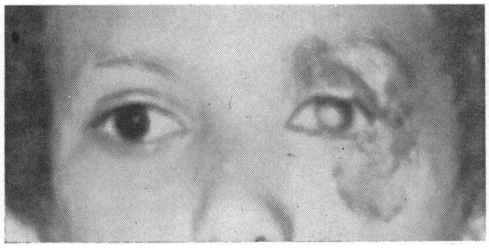
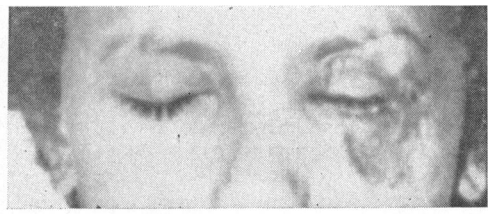


FIG. 5.—Appearance before lid separation, Case 2.



(*a*)



(*b*)

FIG. 6.—Appearance 4 months after operation, Case 2. (*a*) Eyes open; (*b*) Eyes closed.

**Case 3.**—An injury due to the operations of a quack produced a cicatricial ectropion with a large coloboma of the lower lid due to laceration and loss of tissue, so that the scar involved the cheek as well (Fig. 7*a*). In this case the tissue loss was so extensive that the repair took on the character of reconstruction. The eye on the injured side was atrophic.

*Procedure.*—The tarso-conjunctival scar tissue of the coloboma was resected so that the wound was rectangular in shape, and the adjacent scarred skin of the cheek was thoroughly resected. The lower lid at each side of the rectangular coloboma was split at the grey line into its skin-muscle and tarso-conjunctival leaves. The upper lid was split opposite the coloboma at the grey line into its two laminae for a distance equal to the length of the coloboma and a tarso-conjunctival sliding flap was fashioned to fit into the rectangular dehiscence of the lower lid. The sliding flap of tarso-conjunctiva was drawn down by a mattress suture and anchored into position. Two skin-muscle flaps were then fashioned in the lower lid, and these were drawn together and sutured in front of the tarso-conjunctival sliding flap of the upper lid. This part of the procedure was based mainly on the techniques presented by Fox (1958). A split-skin graft cut from the medial aspect of the upper arm was then fitted into the large raw area in the cheek below the two united skin-muscle flaps and was sewn in place. The area of lid fusion was infiltrated 6 weeks later with a few drops of procaine and the lids were separated with scissors (Fig. 7*b*).

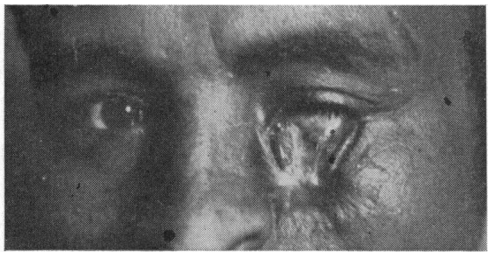


FIG. 7(*a*).—Cicatricial ectropion with large coloboma of the lower lid and scarring of the cheek, Case 3.

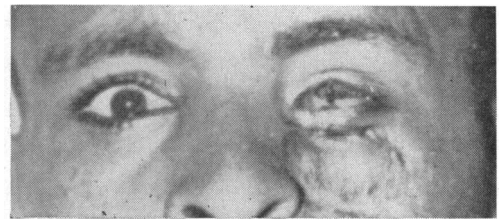


FIG. 7(*b*).—Post-operative result, Case 3.

The cosmetic result was so satisfactory to the patient that further surgery was declined although enucleation of the atrophic left eye and the fitting of a prosthesis would have improved his appearance.

## Summary

(1) In an unusual case of scar-tissue contraction, ectropion of the upper lid developed in association with a fistula of the frontal sinus with bone sequestrum; the ectropion was corrected by a full-thickness skin graft from the contralateral upper lid.

(2) In cases of severe cicatricial ectropion of both lids, one large split-skin graft from another source may be applied to both lids simultaneously.

(3) In a case showing a large coloboma of the lower lid with extensive scarring of the cheek, the repair combined a sliding flap of tarso-conjunctiva from the upper lid and two skin-muscle flaps fashioned in the lower lid with a relatively large split-skin graft from the inner aspect of the arm, the entire procedure being performed at one session.

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