

MODIFICATIONS OF A SIMPLIFIED OPERATION FOR MINIMAL PTOSIS

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In 1961 Fasanella and Servat described "Levator Resection for Minimal Ptosis - Another Simplified Operation". Figures 1-7 are taken from the original article. Since that time there has evolved broader indications for this operation. In addition, a modification of the original suture has resulted in a reduction of a painful keratitis caused by the suture knots originally described. This operation has been now used widely and recently Crowell Beard wrote, "While I don't agree with you the mechanics, I think that your operation is the greatest thing that has happened to ptosis"¹.

In an article entitled "Surgical Treatment of Blepharoptosis - A Quantitative Approach"², Dr. Beard continued to say that "this is the simplest of logical ptosis operations. Its results are predictable, with a high degree of accuracy and are so constant that the procedure is regarded as excellent for congenital ptosis of 2 mm. or less and for certain cases of acquired ptosis. The original suture placement has been modified. 5-0 or 6-0 plain catgut has been found to be adequate. As the tarsus and other tissues are excised, a few mms. at a time an arm of double arm suture is carried from one epithelial side to the other in serpentine fashion. (Fig. 8 and 9). In this way Mueller's muscle is prevented from retracting. The same suture is then carried in a running fashion back to its

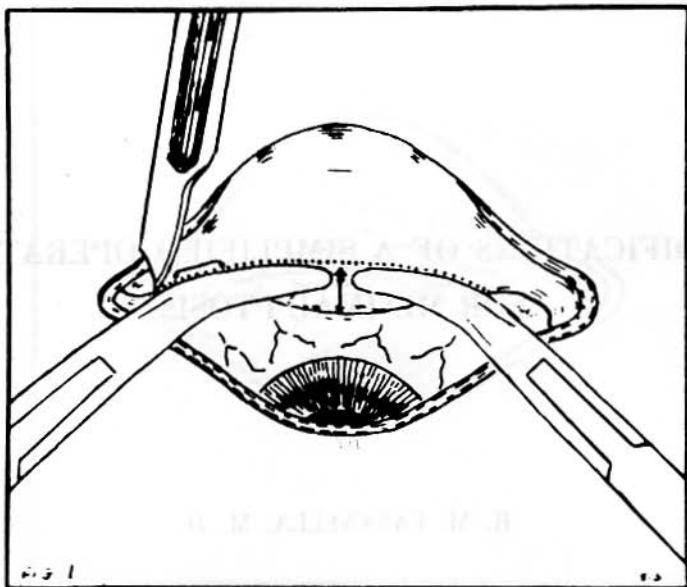


Fig. 1. The lid is everted and 2 curved hemostats are placed grasping conjunctiva, tarsus, levator and Muller's muscle.

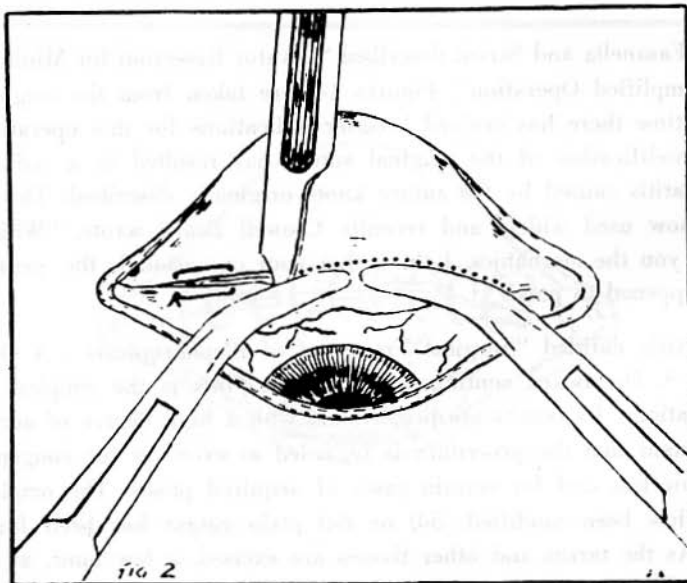


Fig. 2. Pulling up the temporal hemostat, small bites (4 to 5 mm.) are taken and at the same time mattress sutures are carefully and firmly placed with the knot distal to the cornea in the normal position.

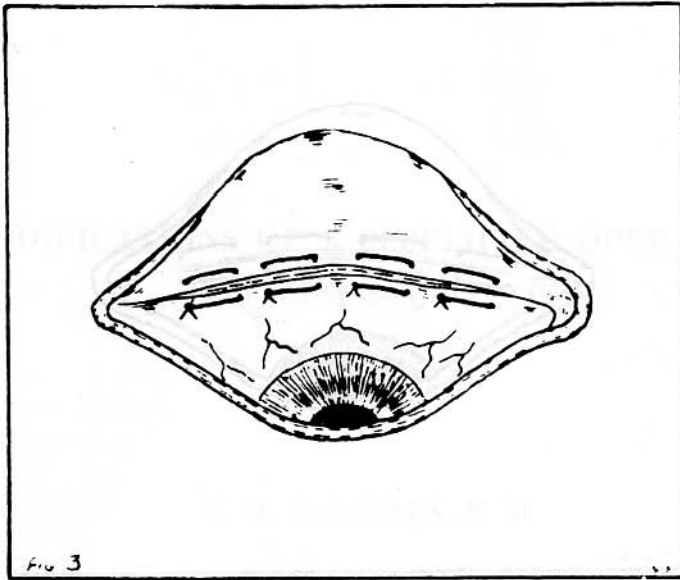


Fig. 3. Appearance of 4 mattress sutures in place before lid is reverted to its normal position. To avoid injury to the cornea the two central knots and all knots should be placed as far temporally and nasally as possible. More recently I have brought the central sutures up through the incision and tied them on the skin surface over rubber dams. The structures held by the hemostats have been sacrificed.

point of origin as a reinforcement and both arms of the suture are carried out through the skin and tied. (Fig. 9). No knots touch the cornea. The first few cases in a series were done according to the original technic and a temporary but painful keratitis was caused by the suture knots. This has been avoided by the use of the described suture placement. Frost sutures are not necessary. In children a patch is used for two or three days but in adults the eye is often left unpatched".

For those who want to continue to use interrupted sutures, rather than a continuous, I have again recommended that all the sutures should be placed so that the knots in the final position of the lids should lie as far away from the limbus as possible. However the two central of the four sutures are brought through the wound edge outward toward the skin and tied with or without a small

MINIMAL PTOSIS

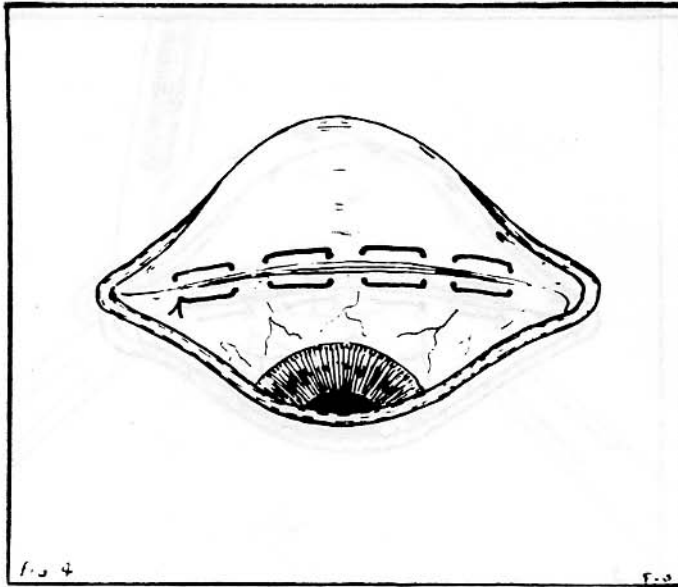


Fig. 4. An alternate method of suturing with only one knot placed temporally.

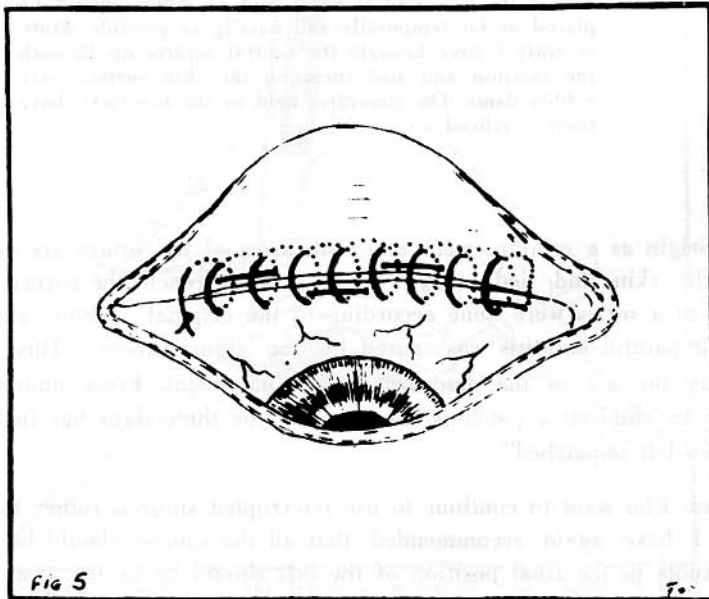


Fig. 5. Still another method of suturing again with one final knot in the temporal side.

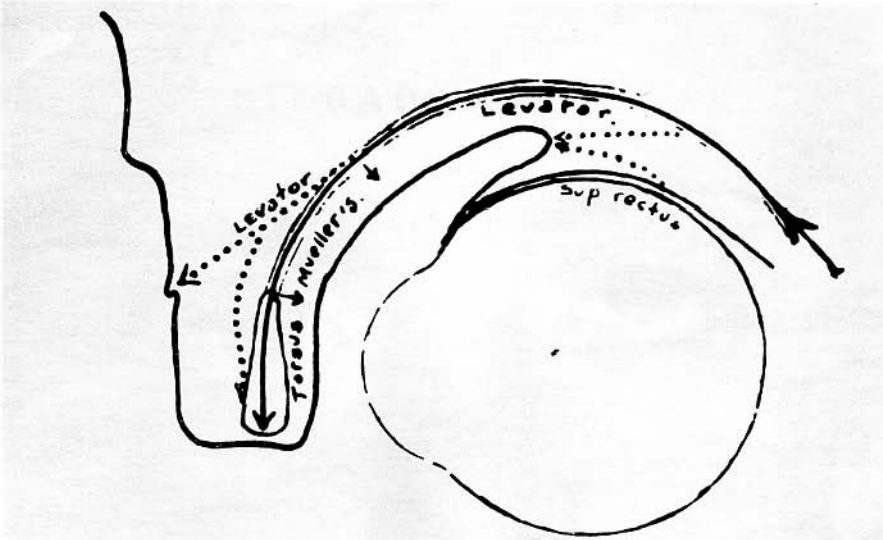


Fig. 6. Diagrammatic sketch demonstrating how the 3 main insertions of the levator and how Muller's muscle and the levator and tarsus may function as a unit.

piece of rubber dam. In addition for further protection the central knots should be moved to the extreme nasal and temporal side. In this fashion there is little if any chance of the sutures rubbing against the cornea. On one occasion, I received a call from the mid-west because of central sutures which had been placed with the knots lying towards the limbus causing a keratitis. I recommended in that case that a doughnut-shaped contact lens should be worn until the fifth day and then the sutures were to be removed.

Beard recommends this operation for the following various types of congenital and acquired ptosis:

A. *Congenital Ptosis*

1. Bilateral congenital ptosis
 - a. Mild (1.5 to 2 mm.)
2. Mild unilateral congenital ptosis where there is good levator function.



Fig. 7. A. Preoperative appearance of ptosis in right eye. Note presence of some lid fold.



Fig. 7. B. Postoperative picture of ptosis repair.

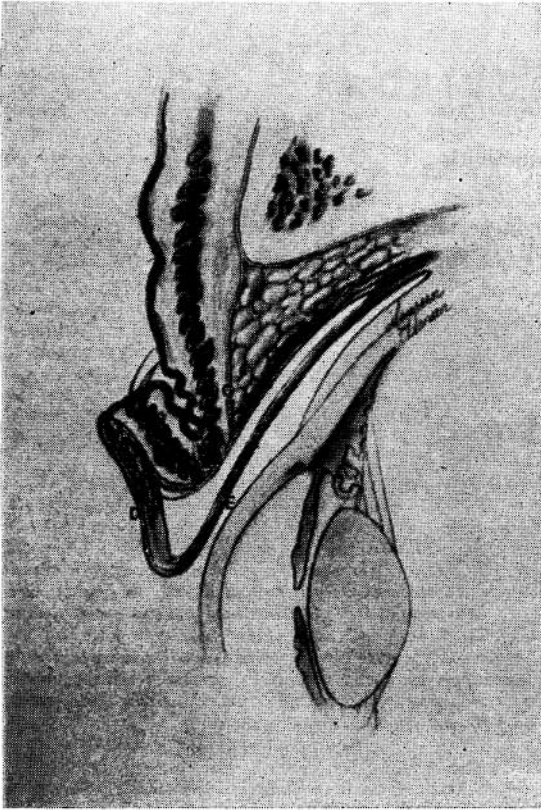


Fig. 8. Cross-section showing anatomical relation of the everted eyelid; A, conjunctiva and Muller's muscle; B, levator aponeurosis; C, orbital septum; D, and E, position of jaws of hemostat in Fasanella-Servat procedure. (Beard, Crowel: The surgical treatment of blepharoptosis: A quantitative approach. Trans. Amer. Ophth. Soc. 64:1966).

B. *Acquired Ptosis*

1. Neurogenic
 - a. Following certain disease processes
 - b. Horner's syndrome
2. Myogenic
 - a. Senile ptosis
 - b. Late acquired hereditary ptosis
3. Traumatic

- a. Post-enucleation (mild)
 - b. Following orbital surgery
4. Mechanical
- a. Following treated conjunctivitis

Callahan has used this operation in certain cases of undercorrected ptosis. He prefers lacing a monofilament suture (as supramid extra 6-0 *) back and forth to

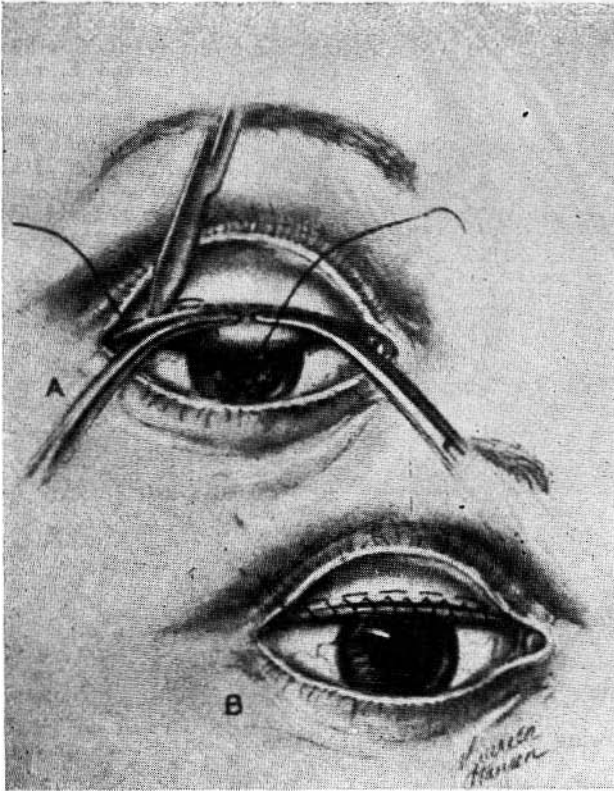


Fig. 9. Modified placement of sutures for Fasanella-Servat procedure. (Beard, Crowell: The surgical treatment of blepharoptosis: A quantitative approach. Trans. Amer. Ophth. Soc. 64: 401, 1966).

* Supramid Extra R. Dr. S. Jackson, Pharmaceutical Diagnostic, Surgical Specialties, 7801 Woodmont Ave., Washington, D. C. 20014.

MINIMAL PTOSIS

unite the tarsal edge firmly with the resected conjunctiva and levator aponeurosis. The monofilament is brought through the lids and each end is placed beneath a small square of adhesive tape. The monofilament suture is pulled out about two weeks later ³.

Dr. Beard says "many cases of Horner's syndrome warrant the Fasanella-Servat operation".

In an unusual case of a ptosis that followed a chalazion excision, a bad over-correction followed the ptosis which might have been corrected by this operation ⁴.

I have described this operation as the 6-S operation - an operation that is indicated for *small* amounts of ptosis, an operation that is *simple*, that leads to *symmetrical* and a *smooth* curve of the lids that can be done in a *short* time and that is *satisfying*, if used in the proper cases, to both patient and to the *surgeon*.

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