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Sutureless Transconjunctival Insertion of Eyelid Weights: A Novel Technique

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Abstract (600 Words):

To describe a novel surgical technique for implanting eyelid weights via a sutureless transconjunctival approach. In comparison to the traditional supratarsal crease approach, this technique does not involve any external incisions or suture placement. The procedure can reduce surgical time and complications associated with the traditional external approach. This case series includes 13 patients who underwent eyelid weight placement via the transconjunctival approach for paralytic lagophthalmos secondary to facial nerve paralysis (12 patients had unilateral paralysis and 1 patient had bilateral) with a total of 14 eyelid weights placed. The procedures were performed at an outpatient office-based surgical center. All procedures were performed or supervised by the same surgeon. Patients were followed for an average 6-month postoperative period for postoperative complications. The sutureless transconjunctival approach to eyelid weight insertion was successful in achieving the desired functional and aesthetic outcomes. Patients undergoing this technique avoided the discomfort of postoperative suture removal. All patients achieved comparable outcomes postoperatively. There were no complications reported across the 13 patients throughout the 6-month postoperative period. This case series demonstrates that the transconjunctival approach for metal eyelid weight insertion is practical, relatively easy to perform, and associated with functional outcomes that are comparable to those achieved with the traditional approach, however, without external incision or placement of sutures.

Importance of research (200 words):

Sutureless Transconjunctival Insertion of Eyelid Weights is effective for upper eyelid loading in patients with lagophthalmos. Complications include poor cosmesis, migration, extrusion, allergy and astigmatism. The authors looked at indications for revision of primary gold weights inserted using a high pretarsal placement and outcomes following correction. A retrospective review of 107 consecutive primary gold weight implants in 95 patients with lagophthalmos in a single centre over a 5-year period. Implant placement utilised a combined high pretarsal placement, levator recession and fixation. Revision surgery included repositioning, removal or exchange. Blinded assessment of eyelid parameters, including cosmesis, was performed by an independent reviewer using photographs from each revision case taken preoperatively and 6 months postoperatively. Mean follow-up 2.5 years (range 1-5) with 15/107 (14%) eyelids revised, the majority within 12 months of the primary procedure. Five eyelids required up to 3 further revisions, giving 21 revisions in total. Indications included prominent implants in 15/21 (71%) revisions; poor eyelid contour in 14/21 (67%, 9 drooped and 5 flattened eyelids); extrusion in 2/21 (10%); persistent erythema in 8/21 (29%, 5 gold allergies and 1 extrusion). Revisions consisted of platinum chain exchange (6), replacement (3), repositioning (8) and removal (4). Following final revision, eyelid contour returned to normal and five eyelids demonstrated mild prominence. High pretarsal placement was successful in treating lagophthalmos, with a complication rate of 1 in 6 requiring a revision procedure, the majority within 12 months. Main indications were unsatisfactory cosmesis from prominence of implant and poor eyelid contour.

Biography (200 words):

Dr. Ebby Elahi is a Clinical Professor of Ophthalmology, Otolaryngology, and Public Health at the Icahn School of Medicine at Mount Sinai. He also serves as Director of Fifth Avenue Eye Associates and FACES Fifth Avenue. An internationally recognized expert in ophthalmic and oculofacial aesthetic and reconstructive surgery, Dr. Elahi is a fellow of the American Academy of Ophthalmology, the American Society of Ophthalmic Plastic and Reconstructive Surgery, and the American College of Surgeons. He is the current president of the Mount Sinai Eye Alumni Association and the immediate past president of the New York Facial Plastic Surgery Society. After initially beginning his medical education at Louis Pasteur University in France, Dr.

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Elahi relocated to New York where he completed his undergraduate studies and obtained his medical degree from the Mount Sinai School of Medicine. He then completed his specialty and subspecialty training in Ophthalmology and Oculofacial surgery at Mount Sinai. For several years, he served as Director of Eye Care Services at Mount Sinai Medical Center prior to assuming the helm at Fifth Avenue Eye Associates and FACES Fifth Avenue. Dr. Elahi has also served as co-director of Mount Sinai's Ophthalmic, Plastic, and Reconstructive Surgery Fellowship program. Dr. Elahi also holds an MBA from Columbia University.

Info of Institute and laboratory (200 words):



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