

Surgical Management of Double Head Pterygium by Novel Approach - A Case Report

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Case Report

Abstract: Purpose: To evaluate a new technique of conjunctival autografting and its postoperative outcome for double head pterygium. **Method:** Study of one case of surgically managed double head pterygium was done. The conjunctival autograft from nasal and temporal pterygium in same eye was taken from the body of pterygium on either side and the harvested conjunctival autograft from body of nasal pterygium was transferred to temporal pterygium and vice a versa without losing limbal orientation. The patient was followed for 2 years. **Result:** No recurrence was noted after 2 years of follow up. **Conclusion:** Transferring conjunctival autograft harvested from bodies of nasal and temporal pterygia in the same eye to utilize for autografting in temporal and nasal pterygium in double head pterygium is minimally invasive and usefull procedure for double headed pterygium.

Keywords: Double head pterygium, conjunctival autograft.

Introduction

India appears to be a part of the pterygium belt.ⁱ Conjunctival autografts are reportedly safe and effective in treating pterygium.^{ii/iii} Excision of double head pterygium leaves large conjunctival defects. We describe a new technique of utilizing conjunctival autografts from the body of double head pterygium itself to tackle these defects.

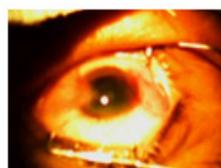
Materials and Method

One male patient of 42 years having double head pterygium in right eye, crossing limbus was selected for the surgery.

Surgical Procedure

Nasal pterygium was first operated under peribulbar anaesthesia with painting, draping, wire speculum was applied. Superior rectus bridle suture was taken with 4-0 silk. Conjunctival incision was taken just inside limbus over the pterygium. It was gently extended over breadth of pterygium. Tenon's tissue attached to conjunctiva was separated from below. Tenon's tissue was excised almost upto insertion of medial rectus horizontally and upto breadth of pterygium vertically. Head of pterygium was then excised. Same procedure was followed on temporal pterygium but tenon's was excised upto 5.5mm temporally and over breadth of pterygium. Conjunctiva over nasal and temporal pterygium was cut to fit planned conjunctival defect on the other side. Nasal conjunctival graft was then

prepared and kept on same bed. Similar procedure was done on temporal conjunctival graft. Then the nasal sided conjunctival graft was transferred to temporal defect side with vice a versa procedure was followed. The grafts were attached using biological glue Reliseal* maintaining limbal orientation of grafts on either side. The eye was patched. This surgical method to our knowledge is not been reported in the world. Post operatively topical dexamethasone and gatifloxacin eye drops were given every two hourly for 1 week and tapered over six weeks. Topical 1% carboxy methyl cellulose drops were use topically for six weeks



Pre-operative picture Post-operative picture



2 years post-operative pic

Results

Follow up was upto 24 months. Indication for surgery was poor cosmesis. No recurrence was noted in the operated eye. (Recurrence was defined as fibro vascular tissue crossing the corneo-scleral limbus onto clear cornea)

Discussion

Out of all techniques for managing primary and recurrent pterygium, conjunctival autografts have shown successful results and are widely accepted in the management of pterygium.^{ii/iii} Concerns have been raised in managing large conjunctival defects created in double head pterygium for which split conjunctival graft have been found to be effective in these cases.^{iv} The above described technique appears to manage this problem effectively. However more cases need to be done to establish its efficacy. Sparing of conjunctiva for future glaucoma surgery is the most important advantage of this technique. This technique is difficult to undertake in scarred conjunctiva. In summary, transfer of conjunctiva from body of nasal to temporal pterygium and temporal to nasal pterygium appears to be successful technique to manage double head pterygium and to our knowledge, this surgical approach has been reported for the first time in the world.

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