

DR JYOTI'S NOVEL TECHNIQUE OF PTERYGIUM EXCISION AND CONJUNCTIVAL AUTOGRAFT USING DIATHERMY AND ITS COMPARISON WITH PTERYGIUM EXCISION AND AUTOGRAFT USING SUTURE

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INTRODUCTION

Pterygium (meaning a wing) is a subconjunctival proliferation of fibrovascular growth encroaching upon the cornea. Its treatment is surgical excision and pterygium excision if followed by conjunctival autograft has better recovery and less recurrence. Various techniques have been described of which autograft with sutures and tissue fibrin glue are the most widely used procedures. In this article a comparative analysis of the new technique with autografting using sutures is described technique which is without use of sutures and glue and offers comparable results.

MATERIAL AND METHODS

A total of 24 eyes of 24 patients of pterygium were enrolled in the study, of which there were 12 cases grouped as category A, where excision was done with conjunctival autografting using suture. Group B consisted of cases of pterygium excision followed by autografting using the novel technique described in the article.

All cases were operated by a single surgeon and the exclusion criteria was absence of any previous ocular surgery.

All cases were preoperatively investigated with routine Complete blood counts, HIV and HbsAg and PT, INR done. All patients who were fit to undergo surgery were taken up for surgery after informed consent. After cleaning and draping, peribulbar block administered. Pterygium is infiltrated with 2% lignocaine.

Excision of the pterygium done by holding at the neck of the proliferative tissue and detaching the head from the corneal surface. Later the remaining part dissected with crescent knife.

This technique gives a clean corneal surface and little need to do lamellar dissection.

The recipient bed is prepared by drying the area. The graft size was 1 mm more than the recipient site in all sides the donor site is prepared by giving subconjunctival lignocaine and the marking made with vernier calipers so that the exact size can be shaped. The graft is prepared

and slowly slid across to the recipient site making sure that the limbal side aligns with the limbus of the recipient site.

Gp A: The autograft was attached using 10'0 sutures. Subconjunctival injection with dexamethasone and gentamycin given.

Gp B: The autograft was attached using diathermy, applying the diathermy at the four corners and additional area too in case the graft is large.

The graft is then secured using diathermy. The two ends of the conjunctiva, one from the recipient site and the other from the graft is lifted and diathermy applied. The graft immediately sticks to the conjunctival edge. The same process is repeated on all four sides. Sometimes it may be required to apply diathermy at one or two sites more but once the graft is well secured, subconjunctival injection of dexamethasone and gentamycin is given and pad and bandage applied for a minimum of 24 hrs.

Post operative examination done after 24 hrs. Postoperative care is done using steroid and antibiotic topical drops 6 to 8 times a day for 1wk followed by 4 times for a month. Topical tear substitutes are also administered for 2 months. After that all medications are stopped.

RESULTS

The patients were evaluated on the following parameters Pain, watering, graft attachment, recurrence.

Grp	PAIN score (0-5) in all patients 1days-7days		WATERING 3days-3wks (all patients)		IRRITATION 1week	GRAFT attachment	RECURRENCE <3 months	RECURRENCE
A	5	3	++	+	++	yes	-ve	1 case
B	3	0	+	-ve	-ve	yes	-ve	0

It was noted that, the graft is taken up well in all patients in both categories and the patients in category B were symptom free in a shorter time with better satisfaction. One yr follow-up showed an absence of any recurrence and no post operative complications. In our study only 12 patients were taken up in each category and it showed that the results with Dr Jyoti's technique, the treatment of pterygium becomes much easier, inexpensive and higher patient satisfaction and patients followed up regularly for six months every month and subsequently three monthly and showed no recurrence.

CONCLUSION

This method is very simple with very little learning curve, inexpensive and offers all advantages of conjunctival autograft without the additional cost of sutures.

FIGURES



1: Excision of Pterygium.



2. Bare sclera at recipient site



3. Harvesting the graft



4. Harvesting the donor graft and making sure that the alignment of limbal side is to limbus of recipient bed.



5. Securing the autograft with diathermy

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