

4. Treatment of Grade 2 Pterygium with Innovative No Suture No Glue Technique

Pterygium is a fibrovascular sheet of sub-conjunctival tissue overriding the cornea. Usually it is more commonly seen in males, especially in hot and humid climatic regions.

The exact cause has not been known though a localized limbal stem cell deficiency has been known to induce the growth of pterygium.



Case of Grade 2 Pterygium before Treatment



After surgery with No Suture – No Glue Technique

A patient was diagnosed as a case of grade 2 pterygium in right eye at the Ophthalmology OPD of Parul Sevashram Hospital. He was operated with “No Suture No Glue” technique for pterygium and discharged on the very next day. On discharge he had mild sub graft hemorrhage while the graft was totally adherent to the sclera bed. On first week follow-up the hemorrhage had completely resolved and on 15th post op day the graft was completely accepted with hardly any evidence of surgery being done. Hence the cosmetic outcome of this technique is also appreciable.

Earlier the surgical technique used for pterygium removal was “Bare Sclera Technique. It had higher recurrence rates and more chances of scleral thinning, and hence was abandoned. Currently the bare sclera is now covered with conjunctival autograft taken from same eye superior forniceal conjunctiva. The autograft can be secured with help of 10-0 vicryl sutures but has more complaint of foreign body sensation. To overcome the disadvantages of sutures, fibrin glue use has become rampant to secure the graft in place. Yet with the use of glue there are chances of transmission of parvovirus B19 and prion diseases and there is a tendency of certain patients to be allergic to the components of glue.

The Ophthalmology Department here at Parul Sevashram Hospital now uses the innovative technique of pterygium surgery with autograft i.e No Suture No Glue Technique. Here the graft is placed on the bleeding sclera bed allowing the blood to clot and serum factors to favor the adhesion of the conjunctival autograft to the sclera bed.

Advantages of No Suture No Glue technique are that it is easy to master, time saving and very cost effective. The patients have earlier recovery with no complaint of foreign body sensation. Care must be taken to avoid unnecessary vigorous rubbing of eyes for few days to avoid graft dehiscence or loss.

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