

Rotational flap versus simple conjunctival excision in pterygium treatment.

Hashim T. hameed/ lecturer-kufa university-al sader teaching hospital

Abstract:

purpose: to evaluate the effectiveness and safety of rotation technique in prevention recurrence of pterygium in comparison with simple conjunctival excision. Method: in this retrospective study , 20 eyes were underwent rotational autograft procedure with which rotated flap sutured to bare area and 20 eyes were underwent simple conjunctival excision leaving bare area. results: patients underwent rotational flap procedure showed low recurrence of pterygium which 5% in comparison with high recurrence of pterygium following simple conjunctival excision which is 20%.conclusion:rotational autograft technique following is effective and safe procedure to prevent pterygium excision and simple excision should not be used alone because of high recurrence which is more difficult for excision.

introduction:

Pterygium is an abnormal over growth of conjunctiva onto the cornea, almost always in the inter palpebral fissure .strong correlation with UV light exposure has been documented ,although dryness ,inflammation , and exposure to wind and dust , or other irritant may also be a factors(1) .

The pathological changes consist of elastoid degeneration of collagen and appearance of subepithelial tissue. Cornea show destruction of bowman,s layer by fibrovascular ingrowth frequently with mild inflammatory changes. The epithelium may be normal ,thick, or thin, and it occasionally show dysplasia .

pterygia are nearly always preceded and accompanied pingueculae , astigmatism is often associated fibrovascular contraction . fibrovascular tissue that has invaded the superficial cornea may extend to visual axis causing visual loss, simple excision carry high recurrence up to 83%(2) , free conjunctival autograft carry less recurrence but with long time procedure (3).

Method:

Randomized retrospective study of 40 consecutive patients attending outpatient clinic presented because of primary pterygium ,ranging from 30-55 years of age , mean age of presentation was 43.2 years .the follow up period range from 6 mo. -24mo. The mean follow up period is 11 mo.

20 patients underwent simple conjunctival excision leaving bare area and 20 patients underwent rotational flap from the superior conjunctiva after freeing it from underlying tenon`s sheath and rotate it until the conjunctiva cover the bare area and then suture the adjacent edges with multiple 8/0 sutures care should be taken not to make a tension or fold in the conjunctiva adequate scraping of limbal area and excision of the whole degenerated cornea , both procedures were done under local anesthesia using 2% xylocain.

Results:

patients were 30-55 years of age and the mean age is 43.5 years at presentation , the follow up period range from 6 months to 24 months average follow up period is 13 months .during this follow up period 4 cases(20)% developed recurrence of pterygium from 20 patients were underwent simple conjunctival excision while one case (5%) had developed recurrence of pterygium from other 20 patients were underwent rotational flap autograft , neither intraoperative nor post operative complications were encountered except for recurrence transient congestion at site of operation usually resolve within 4 weeks ,stitches were removed within 2-4 weeks.

discussion:

In our study pterygium excision rotational conjunctival autograft procedure appear to be simple ,technically not difficult like free conjunctival autograft (6) , and effective where carry low recurrence rate (5%) in comparison with commonly used simple conjunctival excision which carry high recurrence rate (20%) which when occur will be more aggressive and secondary pterygium excision may carry more recurrence rate ,simple conjunctival excision without a combined procedure should not be used .

Many other procedure had been done for pterygium excision like simple suturing , sliding procedure, inferior conjunctival strip, and free conjunctival autograft either carry high recurrence rate or difficult procedure take long time(5-7), rotational autograft is simple and effective procedure for pterygium treatment

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