

A Comparative Study of Surgical Management of Primary Pterygium.

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Abstract

Aim

- To study the rate of recurrence of pterygium and compare different surgical modes of treatment for primary pterygium.

Key Words

- Primary pterygium
- Conjunctiva
- Surgical techniques
- Recurrence.

Results

- It was observed in our study that the recurrence rate was minimal with pterygium excision with conjunctival autograft technique.

Patients And Methods:

- The present study comprises of patients with primary pterygium who attended the opd of ophthalmology of government general hospital,Guntur from april 2016 to april 2017.Total number of patients included in the study are 97.

Patients were examined in detail using slitlamp.

Informed consent was taken and the patients were admitted in the hospital

Inclusion Criteria

- Cases of primary pterygium were included.

Exclusion Criteria

- Cases of recurrent pterygia,pseudo pterygia were excluded from the study.

Methods

Patients were divided into different groups and three surgical procedures were done.

- Group 1-D'OMBRAINS (bare sclera) technique.
 - Group 2-Excision of pterygium with conjunctival rotation pedicle graft.
 - Group 3-Excision of pterygium with conjunctival autograft .
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Date of Submission: 03-11-2017

Date of acceptance: 16-11-2017

I. Introduction

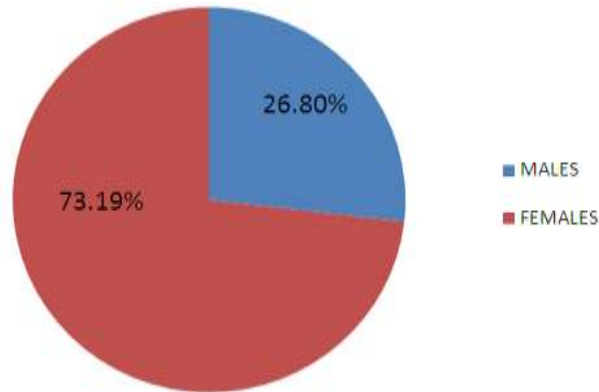
- A pterygium is a winglike mass of fibrovascular tissue extending from the conjunctiva to the cornea [1]
- The condition is more common in warm, dry climates.
- They are found more commonly in men than women and in people who work outdoors[2]
- The prevalence increases with age.
- Pterygium is found more commonly nasally than temporally[3]

The pathophysiology of pterygium includes elastotic degeneration of collagen and fibrovascular proliferation . The p53 gene, which is a marker for neoplasia has been found in the epithelium of pterygium. This raises the possibility that pterygium may be a growth disorder due to uncontrolled cell proliferation rather than a degenerative disorder.

- Surgery is indicated when there is decreased visual acuity either because of induced astigmatism or encroachment onto the visual axis, marked cosmetic deformity.

TABLE 1 GENDER DISTRIBUTION

S.NO	SEX	TOTAL	PERCENTAGE
1	MALES	24	26.80%
2	FEMALES	71	73.19%



AGE DISTRIBUTION

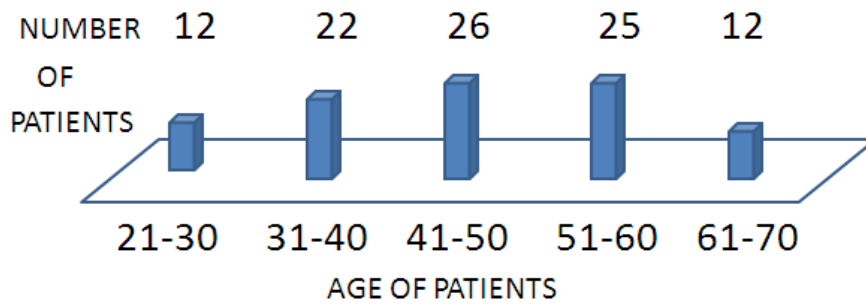


TABLE 2 AGE DISTRIBUTION

S.NO	AGE	TOTAL CASES	PERCENTAGE
1	21-30	12	12.36%
2	31-40	22	20.36%
3	41-50	26	26.80%
4	51-60	25	25.77%
5	61-70	12	12.37%

TABLE 3 DISTRIBUTION DEPENDENDING ON LATERALITY

UNILATERAL	BILATERAL
52	45

TABLE 4 PATIENT DISTRIBUTION IN VARIOUS TREATMENT GROUP

GROUP	SURGICAL TECHNIQUE DONE	NO.OF PATIENTS
1	D'OMBRAINS(BARE SCLERA)TECHNIQUE	10
2	EXCISION OF PTERYGIUM WITH CONJUNCTIVAL ROTATION PEDICLE GRAFT	10
3	EXCISION OF PTERYGIUM WITH CONJUNCTIVAL AUTOGRAFT	77

TABLE 5 RECURRENCE WITH DIFFERENT TECHNIQUES

S.NO	SURGICAL TECHNIQUE	CASES DONE	RECURRENCE	PERCENTAGE
1	D'OMBRAINS(BARE SCLERA) TECHNIQUE	10	5	50%
2	EXCISION OF PTERYGIUM WITH CONJUNCTIVAL ROTATION PEDICLE GRAFT	10	2	20%
3	EXCISION OF PTERYGIUM WITH CONJUNCTIVAL AUTOGRAFT	77	2	2.5%

II. Discussion

- There are various surgical techniques for the treatment of primary pterygium.when a large conjunctival lesion is removed the defect heals by scarring/cicatrisation.to avoid this conjunctival autograft from same eye or fellow eye is used[4]. For larger and recurrent pterygia, the goal of treatment has been prevention of recurrence[5].In our study of 97 cases done during a period of one year we have found that the recurrence rate is minimal i.e 2.5% with excision of pterygium and conjunctival autograft.
- The recurrence rate with D'ombrains bare sclera technique is 50%.
- The recurrence rate with excision of pterygium and conjunctival rotation pedicle graft is highest 20%.

III. Conclusion

- After our study done during a period of one year comprising of 97 cases we have come to a conclusion that the incidence of recurrence is very less with excision of pterygium and conjunctival autograft.

References

- [1] Cornea krachmer Holland and Mannis 3rd edition
- [2] parsons diseases of the eye 22nd edition chapter 14 page 184
- [3] Albert jackobiec principles and practice of ophthalmology vol I ,3rd edition,page 886.
- [4] Yanoff & Duker ophthalmology 4th edition chapter 4.9 page 204

*Dr.G.Serina Samuel M.S. "A Comparative Study of Surgical Management of Primary Pterygium."
IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) 16.11 (2017): 33-36