



MEDICAL TREATMENT OF EARLY PTERYGIUM

Ophthalmology

DR. Hasmukh I Joshi*

[M.S. OPHTH.], ASST. PROF. in BMCRI PALANPUR. *Corresponding Author

DR. Sonal Agarawal

ABSTRACT

Background and objective:- This study is carried out to learn the treatment of pterygium by non surgical method. It is good medical treatment to prevent recurrence of early pterygium in the sun and sandy area.

Method:- Hyaluronidase is used in form of injection for the treatment along with local anaesthetic. It is given on the neck of pterygium and followed by fluorometholone with tobramycin drops along with nephasoline with CPM combination for period of three months.

Result:- In early pterygium growth reduced by 70%. Apex and neck become pale in 20% cases and in 10% no change. In one case patient complains loss of vision, treated by medical treatment. Follow up after 3 months all patients are satisfied.

Conclusion:- In sun and sandy area medical treatment of early pterygium is very useful to deprive the visual acuity. Particularly in farmers, labours and ladies.

KEYWORDS

• INTRODUCTION:-

Pterygium is a degenerative condition of sub conjunctival tissues which proliferate as vascularized granulation tissue invade cornea destroying as it closes so the superficial layers of stroma and Bowman's membrane the whole being covered by conjunctival epithelium.

The lesion thus appears as a triangular encroachment of the conjunctiva upon the cornea with front of blunt apex numerous small opacities lying deeply in the neighbouring part of the cornea. The thick vascularized conjunctiva appears on the cornea from the canthus and is loosely adherent in its whole length of sclera the area of adherence being always smaller than its breadth so that there are folds at the upper and lower border. The study was conducted to find out clinical effect of inj. hyalase in the early pterygium at limbus upto 1 to 1.5 mm size in cornea.

• Why this study is carried out?

Because after surgical method recurrence of pterygium is about 40%. By this study recurrence is very less

MATERIAL AND METHOD :-

This is a prospective non randomized clinical study was carried out in the general hospital palanpur between Jan 18 to June 18. Patients having complaint of redness foreign body sensations watering were examined on the slit lamp for the extension of pterygium on limbus. Visual acuity and fundus examination were done. Eye speculum was applied and paracaine drops instilled on the cornea and conjunctiva before this. 1500 i.u. of hyalase injection was dissolved in 2 cc of d.w. out of this 0.25 cc of solution taken in insulin syringe and 1 cc of xylocaine 2% was also added and given at the neck of pterygium with 26 gauge needle by lifting the neck with tooth forcep. Antibiotic ointment was applied and pad was given over the eye ask the patients to sit for half an hour. Then take away the pad and see that there is no active bleeding from the conjunctiva. Ask the patient to go home with dark goggles and instilling fluorometholone with tobramycin drops along with nephasoline with CPM combination 3 times a day. And advice to come after 48 hours for further treatment. This treatment to be taken for 3 months.

Written consent of all the patients were taken and ethical approval was also confirmed this is outdoor procedure to be carried out under the observation.

• STATISTICAL ANALYSIS:-

1) Groups are divided according to the effect of drug on the tissues, results are as follow.

Type	Change in %
Group 1	Growth reduced 70%
Group 2	Apex & neck become pale 20%
Group 3	No change 10%

2) occupation and age of the patients is considered as follows. It is very common in farmers and labours and age groups of 41 to 50.

Occupation	Pts.
Farmers	22
laboures	18
Factory workers	06

Age	Patients
1-10	2
11-20	6
21-30	6
31-40	9
41-50	27

sex ratio : is more common in female because they have to work on heat and sandy area. Poor personal hygiene in female.

Sex	
Male	22
Female	28

• DISCUSSION:-

Hyaluronidase is an enzyme found naturally in your body that breaks hyaluronic acid down. It is very common in tropical regions. Improper nutrition in poor class and prevalence of local irritation factors to the eye. Meyer and Palmer first isolated hyaluronic acid. Duffie and Chain state that enzyme hyaluronidase liquefies the tissue cementing substance hyaluronic acid. This occurs by the depolymerisation of hyaluronic acid through hydrolysis of linkage with the decreasing viscosity of the polysaccharide hyaluronic acid allowing more rapid spread of fluids through the connective tissues. One elderly patient with amblyopia was treated with loading dose of tablet prednisolone 40mg and tapered along with antihistaminics. The action of hyaluronidase is reversible with complete restoration of the inter cementing substances in 24 hours.

• Treatment options:-

In fleshy pterygium one should go for surgery. Autograft surgery, 1) Suture of conjunctiva, 2) Use of patient's own plasma, 3) Amniotic membrane transplantation. One should use topical antibiotics with non-steroidal drops with astringent drops for period of three months.

• Limitation of study:-

We have studied this method in sunny and sandy area of Banaskantha district but Rajendra Rohatgi et al study in Kanpur eye hospital they found disappearance of growth in 80% and diminution in size and vascularisation in 60-70 cases.

• CONCLUSION:-

In tropical area non-surgical treatment of early pterygia is useful by

this method along with topical therapy. Chances of recurrence is very less.

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