

Role of Different Treatment Modalities in Management of Peripheral Ulcerative Keratitis:a Case Series



Medical Science

KEYWORDS :

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ABSTRACT

Aim:To review the aetiology, various possible treatment modalities and visual outcomes of patients with peripheral ulcerative keratitis (PUK). **Methods:** it is a prospective clinical study involving 39 eyes of PUK. Patients were examined and treated. **Results:** The total of 27 patients (39 eyes) were included in the study of which 25.9% were in the age group of 61-70 years. The study population had 38% (15 eyes) males & 62% (24 eyes) females. 39% (15 eyes) of PUK were due to Mooren's ulcer. All the patients treated either topically or with various surgical modalities showed statistically significant improvement in terms of visual acuity from their pre-treatment level. ($p < 0.05$) **Conclusion:** Both topical and surgical treatment modalities show promising results in PUK patients with significant improvement in visual acuity.

INTRODUCTION:

Peripheral ulcerative keratitis (PUK) is characterized by inflammation involving the limbal part of the cornea and adjacent sclera. It is characterized by collagen destruction, cellular infiltration, limbal vascular changes indicative of vasculitis. Presence of inflammatory effector cells and cytokines which can be involved in the production of **collagenase** and **proteoglycanase**, and may contribute to corneal degradation. The circulating immune complex deposition and autoimmune reactions to corneal antigens, and hypersensitivity reactions to exogenous antigens. If not properly treated, PUK can progress to perforation resulting in significant ocular morbidity and when associated with a systemic autoimmune condition may be potentially life-threatening.

DESIGN OF STUDY: A prospective clinical study.

METHODS:

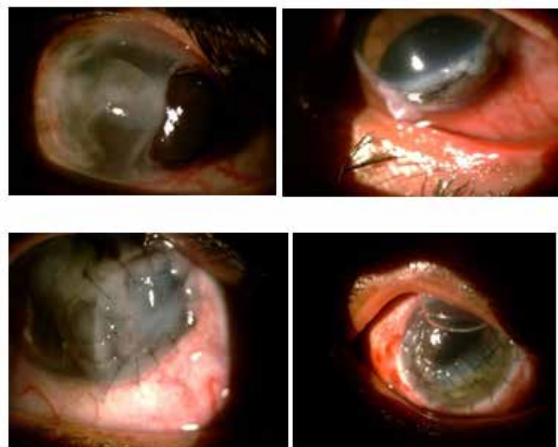
It is a prospective interventional study done at Shree C.H. Nagri Municipal Eye Hospital from June 2010 to September 2012 wherein patients presenting with peripheral ulcerative keratitis of any age in one or both eyes were included. During this period 27 cases (39 eyes) were observed and detailed ophthalmic examination including visual acuity and slit lamp examination was done. Detailed systemic evaluation with relevant laboratory investigations were done in all patients to find out aetiology. Depending on the findings, patients were treated by various modalities like topical and surgical treatment including cyanoacrylate glue and bandage contact lens, patch graft, conjunctival peritomy. Close follow up was done with regular monitoring of visual acuity and slit lamp findings.

RESULTS:

The total of 27 patients (39 eyes) were included in the study of which 25.9% were in the age group of 61-70 years. The study population had 38% (15 eyes) males & 62% (24 eyes) females. 39% (15 eyes) of PUK were due to Mooren's ulcer. All the patients treated either topically or with various surgical modalities showed statistically significant improvement in terms of visual acuity from their pretreatment level. ($p < 0.05$)

CONCLUSION:

PUK is more common in elderly age groups. PUK associated with rheumatoid arthritis is more common in females while Mooren's ulcer is in males. Both topical and surgical treatment modalities show promising results in PUK patients with significant improvement in visual acuity.



ETIOLOGY	NO OF PATIENTS	NO. OF EYES	%
MOOREN'S	9	15	39
RA	7	11	28
DRY EYE	2	4	10
TRAUMA	2	2	5
POST SURGICAL	2	2	5
INFECTIOUS	5	5	13

MODALITIES	NO OF PATIENTS	%
TOPICAL	23	59
SURGICAL	16	41

TREATMENT	NO OF EYES	%
TOPICAL	23	59
PATCH GRAFT	5	13
GLUE + BCL	6	15
CP + GLUE + BCL	2	5
AMNIOTIC MEM	2	5
CONJUNCTIVAL PERITOMY	1	3

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