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Original Research Paper

CLINICAL PROFILE OF POSTERIOR BLEPHARITIS – A HOSPITAL-BASED STUDY

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ABSTRACT
Purpose: To study the clinical profile of Posterior Blepharitis in a Tertiary Care Hospital in Kashmir.
Methods: In this prospective study, patients presenting with Posterior Blepharitis visiting Out Patient
Department (OPD) of Government Medical College, Srinagar from January 2021 to June 2021 were enrolled and evaluated. A
complete history and detailed ophthalmological evaluation was done. Results: 50 patients were evaluated. The mean age of
patients was 58.36±6.42 years. Males were 56% and females 44%. Most of the cases from our study had complaints of
dryness/grittiness (30%), swollen lids (18%), itching (16%), and crusted lashes (16%).

KEYWORDS: Posterior Blepharitis, Meibomian Gland Disease, Lid margin, Azithromycin

INTRODUCTION:

Blepharitis is inflammation of the eyelids. It is associated with dryness, grittiness, irritation, hyperemia, foreign-body sensation, photophobia, swollen lids, and crusting of the eyelids. Less frequently, blepharitis can result in permanent changes to the eyelid morphology and visual deficits due to keratopathy and corneal ulceration. [1,2]

Anatomically, blepharitis is divided into anterior and posterior types. Posterior blepharitis occurs at the inner edge of the eyelid that is in contact with the eyeball. Meibomian gland dysfunction (MGD) is the main cause of posterior blepharitis. MGD is characterized by abnormal meibomian gland secretion, dry eye symptoms, and ocular surface inflammation. [3]

The incidence of MGD increases with age and tends to affect males aged >65 years. Rosacea was diagnosed in 20% of MGD patients and 46% of those with MGD were diagnosed with concurrent seborrheic dermatitis. ^[4,5]

Grading of posterior blepharitis can be performed by using the Compression Of The Eyelid (COTE) grading system depending on the nature of secretion on compression COTE Grading System

METHODS:

This was a hospital-based, prospective, descriptional study that was conducted over a period of 6 months. The study was undertaken after obtaining clearance from the Institutional Ethical Committee. Patients visiting the Out Patient Department of GMC, Srinagar with the diagnosis of posterior blepharitis were evaluated. After explaining the purpose and procedure of the study an informed consent of the patient was taken. Demographic information, medical and surgical history, occupational history, and personal history were noted. All patients who presented to the Eye OPD of Government Medical College, Srinagar with complaints of redness, dryness, swollen eyelids, itching, burning, gritty sensation, crusted lashes, flaking of the skin in the eyelid region, and sensitivity to light were evaluated and detailed Slit Lamp Examination was done to exclude the cause. Patients with a diagnosis of Posterior Blepharitis were included in the study and their clinical profile was noted.

RESULTS

A total of 50 patients who attended the Eye OPD of GMC Srinagar from January 2021 to June 2021 were enrolled in the study and evaluated. 56% of the patients were males, while as 44% of the patients were females (Table 1).

Table 1: Sex distribution of the study patients

SEX OF THE PATIENTS	FREQUENCY	PERCENTAGE (%)
MALE	28	56
FEMALE	22	44
TOTAL	50	100

In our study, the mean age of the patients was 58.36 ± 6.42 years. Maximum patients (26%) were above 60 years of age (Table 2).

Table 2: Age distribution of the study patients.

AGE OF THE PATIENTS (YEARS)	FREQUENCY	PERCENTAGE (%)
<20	2	4
21-30	6	12
31-40	8	16
41-50	9	18
51-60	12	24
>60	13	26
TOTAL	50	100

All patients had features of meibomitis like dilated meibomian glands capped with oil and the secretions of the glands were thicker than normal. 15 patients presented with dryness and grittiness, 8 patients presented with itching, 8 patients presented with swollen eyelids, 6 patients presented with photophobia, 8 patients presented with crusted lashes, and 4 patients presented with flaking of the skin around the lashes (Table 3).

Table 3: Clinical Features of the study patients.

CLINICAL FEATURES	FREQUENCY	PERCENTAGE (%)
Dryness/Grittiness	15	30
Swollen Lids	9	18
Photophobia	6	12
Itching	8	16
Crusted Lashes	8	16
Flaking of skin around	4	8
lashes		
TOTAL	50	100

DISCUSSION:

Posterior blepharitis is characterized by inflammation of the posterior lid margin and has various aetiologies, including MGD, conjunctivitis, and systemic conditions such as rosacea, eczema, and atopy. $^{\scriptscriptstyle{[1,3,6]}}$

Posterior blepharitis was most common in middle to old-aged individuals (26% in >60 years of age). This was in

concordance with other similar study data. Most of the cases from our study had complaints of dryness/grittiness (30%), swollen lids (18%), itching (16%), and crusted lashes (16%). Patients with MGD have evaporative tear disorders, leading to corneal surface vulnerability. Abnormality in the meibum may be responsible for the symptoms experienced in posterior blepharitis. Patients present with symptoms of pain, redness, dryness, gritty sensation, swollen eyelids, itching, burning, sensitivity to light, crusted lashes, sticky eyelids, watering, flakes of skin around eyelashes, and greasy eyelids.

Diagnostic evaluation of a patient with posterior blepharitis involves detailed history taking including drug history and systemic evaluation. Slit lamp examination is to be done to evaluate tear film appearance looking for debris, saponification, and meniscus height. Tear break-up time determines the stability of the tear film. Lid margin examination includes a detailed description of capping, distended orifices, migration of gland line, narrowing of ducts, and opacified glands. $^{\scriptscriptstyle{[9,10]}}$

Lid hygiene is the mainstay of treatment. It includes warm compresses and mechanical massage of eyelids with the expression of accumulated secretions. Topical treatment includes topical antibiotics in the form of eye ointments and antibiotic eye drops (1% azithromycin). Oral azithromycin 500 mg three times daily in 3-day cycles or oral azithromycin 1 g dosed once per week for 3 weeks causes significant improvement in patient symptoms and lid margin signs. Oral doxycycline twice daily also demonstrated a clinical improvement in blepharitis with minimal reported side effects. Topical 0.05% cyclosporine and topical steroids can also be used. Systemic review is essential for long-term benefits.

CONCLUSION:

Posterior blepharitis is a chronic and potentially sight-threatening eyelid and ocular surface disease. It tends to occur more commonly in middle to old-aged males. The clinical features range from dryness/grittiness to crusted lashes. It is essential to rule out systemic causes while evaluating a patient for blepharitis.

Conflicts Of Interest:

None

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