

CHRONIC BLEPHARITIS: ONE YEAR EXPERIENCE AT A UNITED NATIONS FIELD HOSPITAL

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ABSTRACT

Objective: To document the clinical features of chronic blepharitis in our patients.

Study Design: Descriptive study

Place and Duration of Study: Pakistan Field Hospital 3 Level III (United Nations-African Union Mission in Darfur), Nyala Sudan from Feb 2011 to Jan 2012.

Patients and Methods: All the diagnosed chronic blepharitis patients attending our ophthalmology clinic were further evaluated and included. History focused especially on burning, itching, grittiness, discomfort and redness of eye lids. Slit lamp examination was done to classify disease as seborrhoeic anterior, staphylococcal anterior and posterior blepharitis. Uncomplicated disease was graded as mild; blepharitis associated with dry eyes was moderate whereas presence of trichiasis, papillary conjunctivitis or inferior punctate corneal erosions was severe disease.

Results: Out of 399 patients seen, 52 (13.03%) had chronic blepharitis. The mean age of these patients was 35.87 ± 8.16 years. Of them, 40 (76.92%) were males and 12 (23.08%) were females. 28 (53.85%) cases were symptomatic. 36 (69.23%) had anterior blepharitis, 8 (15.38%) had posterior blepharitis whereas 8 (15.38%) had mixed blepharitis. 30 (57.69%) had mild disease, 18 (34.62%) had moderate disease whereas 4 (7.69%) had severe disease.

Conclusion: Chronic blepharitis is usually symptomatic, mostly mild in severity and anterior in location.

Keywords: Blepharitis, Meibomian gland.

INTRODUCTION

Blepharitis is a commonly encountered condition. The actual prevalence may be a bit difficult to estimate. Nevertheless, it is reported in up to 37% of patients seeking ophthalmological advice¹. Others have documented rates approaching 85-90%². Though the disease is generally mild, it can easily have secondary effects on the cornea and conjunctiva³. Moreover, if left untreated, it can have significant impact on the physical and emotional well-being of the patient⁴. It is already well established that a number of ocular conditions such as keratconjunctivitis and trichiasis and dermatological conditions such as seborrhoeic dermatitis, atopic dermatitis and rosacea are associated with chronic blepharitis⁵. Despite a growing understanding of the disease process

and the recent advances in management, it can at times pose a significant diagnostic and therapeutic challenge. We carried out this study to determine the frequency of chronic blepharitis in our patient population belonging to different races and nationalities and to document the clinical aspects of this disease.

MATERIAL AND METHODS

This descriptive study was carried out at Pakistan Field Hospital Level III located at Nyala, Sudan from Feb 2011 to Jan 2012. This is a 56 bedded advanced field hospital working under the auspices of African Union- United Nations Mission in Darfur (UNAMID). It provides services to a heterogeneous group of United Nations employees (both military peace keepers and civilians) with different nationalities and ethnic backgrounds. Most of these people are new to the desert environment of Darfur. We included all of the patients attending our ophthalmology clinic for the first time during the study period after obtaining informed written consent. Those labelled as having chronic

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blepharitis (on clinical grounds, as described below) were further evaluated in detail. Demographic data including age, gender and nationality was noted down. A detailed history was taken, focusing especially on burning, itching, grittiness, discomfort and redness of eye lids. Patients were then examined on slit lamp. Staphylococcal anterior blepharitis was diagnosed by hyperemia of lid margins, and scales around lash follicles while seborrheic anterior blepharitis by soft scales and greasy eye lashes. Posterior blepharitis was diagnosed by oil globules over meibomian gland orifices and oily and foamy tear film. Severity was assessed using the following criteria as mild disease process not causing any complications, moderate blepharitis associated with dry eyes and severe blepharitis associated with trichiasis, papillary conjunctivitis or inferior punctate corneal erosions. Data was analyzed with PASW Statistics 18. Quantitative variables were described as mean and standard deviation (SD) whereas qualitative variables were described as frequencies and percentages.

RESULTS

During this study period, 399 patients reported to the ophthalmology clinic. Out of these, 52 (13.03%) were diagnosed to have chronic blepharitis. The mean age of these patients with chronic blepharitis was 35.87± 8.16 years. Of them, 40 (76.92%) were males and 12 (23.08%) were females. Their native countries are shown in fig-1. Symptoms were present in 28 (53.85%) cases, with a duration of 13.67 ± 4.26 weeks. The details of the main symptoms are shown in table-1. On examination, 36 (69.23%) had anterior blepharitis, 8 (15.38%) had posterior blepharitis whereas 8 (15.38%) had mixed blepharitis. Mild disease was seen in 30(57.69%) patients, moderate in 18(34.61%) patients and severe disease was seen in 4(7.69%) patients.

DISCUSSION

Chronic blepharitis is a worldwide public health problem⁶. It is a condition seen as commonly by ophthalmologists as are febrile illnesses encountered by internists or traumatic

injuries present to the surgeons. Yet, even today, significant literature published on the epidemiology of this frequent eye disease is lacking. This was the main impulse to document our experience. For the same reason, we were

Table-1: Symptoms of blepharitis in patients of native countries.

S. No	Symptom	n (%)
1.	Burning	17 (32.69%)
2.	Grittiness	15 (28.85%)
3.	Itching	12 (23.08%)
4.	Redness of lid margins	6 (11.54%)

* Multiple symptoms were observed in all patients

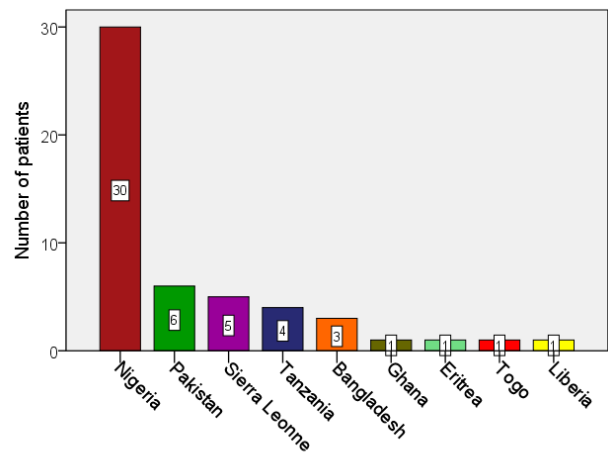


Figure-1: Native countries of patients with chronic blepharitis.

unable to present a useful number of recent references to compare and contrast most of our results. Different classifications have been proposed e.g by McCulley,⁷ Huber-Spitzky⁸ and Mathers⁹ but all these classifications are complicated enough to be used in clinical practice. For practical purposes, Wilhelmus classification is easy to remember and divides blepharitis into two main groups, anterior (involving the hair follicles) or posterior (involving meibomian glands). Each may provoke or aggravate the other variety¹⁰. There is confusion about the exact etiology of blepharitis as no one knows the exact triggering factor¹¹. Several different etiologies

have been suggested, including staphylococcal infection, *Demodex folliculorum* infestation, and primary sebaceous gland disease, as in acne rosacea. However, recent studies have focused on changes in the tear film¹².

In our study, the vast majority of patients with blepharitis were males. This just reflects the unequal gender distribution of patients attending our outdoor clinic and in no way indicates that the disease is commoner in males. Staphylococcal variety was commoner than seborrheic, in contrast to findings of Bukhari AA et al and Sacca SC^{2,13}. As regards the location of the disease, anterior blepharitis was commoner than the posterior or combined variety. This is in keeping with the findings of a study done by Sacca et al¹³. However, earlier in 2003, Venturino et al had documented a greater proportion of patients presenting with posterior blepharitis¹⁴. This might just be a co-incidence or may be simply related to selection biases that exist in different studies. Symptoms were present in only a little more than half of the patients. This is not a good sign because most people generally only seek advice when they are symptomatic. Left untreated, the disease would definitely progress leading to complications and difficulties in successful eradication later on. Nevertheless, nearly 60% patients had mild involvement, which means that in majority of the cases, the disease is actually relatively easy to treat and control once diagnosed confidently. The treatment mainly revolves around maintenance of good eyelid hygiene and application of hot massages. In some cases, the infective and inflammatory components may need to be countered by using antibiotics and local corticosteroids¹⁵.

The major limitation of our study is the small number of patients with chronic blepharitis. Additional studies enrolling a greater number of patients are needed for more accurate assessment.

CONCLUSION

Chronic blepharitis is usually symptomatic, mostly mild in severity and anterior in location.

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