

Phthiriasis Palpebrarum

Muhammad Khizar Niazi and Muhammad Aamir Arain

ABSTRACT

Phthiriasis palpebrarum (lice infestation of palpebrae) is a rarely reported disorder and may present as blepharoconjunctivitis. It is usually seen in lower socioeconomic groups and spreads through either sexual contacts or directly through linen or clothing. We report a family with phthiriasis palpebrarum in which the primary source of infestation was the paternal uncle of two children. Mechanical removal proved to be quite effective in treating the disease and preventing its recurrence.

Key words: *Phthiriasis palpebrarum. Mechanical removal. Contact infection. Lice infestation of palpebrae.*

INTRODUCTION

Infestation of the eye lashes by phthiriasis palpebrarum (crab louse) is an unusual cause of blepharitis.¹ Pubic hair is their main habitat; these lice are quite often found on the hair of abdomen, thighs and in the axilla. Rarely may they invade the eyebrows and eyelashes.² Its occurrence in different parts of the world has been reported, by different authors.¹⁻⁴ But, very few authors have reported its occurrence from Pakistan.

We report 3 cases of phthiriasis palpebrarum in the same family. Only one member presented with blepharitis not responding to treatment while the rest were found on screening.

CASE REPORT

Case 1: A 3-year-old boy came to Eye Department, Military Hospital, Rawalpindi with complaints of itching of the eye lids and burning sensation in both eyes since 2 months. On slit lamp examination multiple grayish white coloured lice and nits were seen over both lid margins of both eyes near the roots of cilia (Figure 1). There were no lice on the eye brows or scalp. Parasites and nits were removed from the eyelashes with the forceps under general anaesthesia and sent for parasitological analysis. They were all confirmed as *Phthirus pubis* by a microbiologist. His whole family was screened for the source of infestation.

Case 2: A 5-year-old boy (sibling of case 1) was called for ocular screening. On slit lamp examination few grayish white coloured lice were seen on both eye lid lashes (Figure 2). Axillary and pubic hairs were scanty

and not well developed. Parasites and nits were removed along with eyelashes with forceps under sedation and were confirmed as *Phthirus pubis*.

Case 3: Paternal uncle of the children was found to have itching of the eyelids and burning sensation in both eyes since 3 months. On slit lamp examination multiple grayish white coloured lice and nits were seen over both upper and lower lid margins. Few lice were also seen on eyebrows (Figure 3). Visual acuity, anterior segment and posterior segment examination was unremarkable. There were no lice on the scalp but axillary and pubic hairs were infested. Parasites and nits were removed from the eye lashes with the forceps under slit lamp and sent for parasitological analysis. They were all confirmed as *Phthirus pubis* by the microbiologist. On inquiring about the sexual history, he reported multiple sexual contacts. He was advised to shave his axillary and pubic hairs. The family was advised to wash and heat dry all linen and clothing.

DISCUSSION

Infestation of the eyelashes by *Phthirus pubis* crab louse is rare. The transmission can be done following sexual contacts or by the means of infected clothing or bed linen.¹ The parasite probably reaches the eye by the hand from the pubic hair.² Infants and children with phthiriasis palpebrarum are usually infested by direct passage of lice from the axillary hairs of the parents or by other infected contacts.⁶ The site of parasitosis often indicates the mode of transmission, as these lice move only very short distance from the point of their first contact. Involvement of the scalp is extremely rare.²

The symptoms associated with phthiriasis palpebrarum range from pruritic lid margin to blepharitis with marked conjunctival inflammation. Blood tinged debris on the eyelids and eyelashes are common.³ A case of marginal keratitis by crab louse has also been reported.⁷

Department of Ophthalmology, Military Hospital, Rawalpindi.

Correspondence: Dr. Muhammad Aamir Arain, Registrar
Ophthalmology, Military Hospital, Rawalpindi.

E-mail: doctorarain@yahoo.com

Received December 18, 2008; accepted June 15, 2009.



Figure 1: Lice and nits on cilia.



Figure 2: Few lice and nits on cilia of eye lids .



Figure 3: Louse on the eye brow.

Treatment of phthiriasis palpebrarum is removal of lice and nits with the forceps. One percent mercuric oxide ointment, 1% physostigmine ointment or 1% gamma benzene hexachloride cream can also be applied over the lid margins with equally good results. Recently, two 200 ug/kg doses of oral ivermectin were given a week apart to eradicate the disease.⁸

In this series, we observed that the source of primary infestation was the uncle of kids who had history of sexual contacts. The children contracted the lice from their uncle as they used to live together. It is, therefore, recommended that all family members should be screened for lice infestation and the presence of any other sexually transmitted disease. To prevent the spread of an epidemic proper hygiene is important. All clothes, towels and linen should be washed thoroughly and heat dried. In these cases, our results of mechanical removal were good and the latest follow-up after about 6 months revealed no recurrence of the disease in all the cases.

Acknowledgment: We would like to thank the efforts rendered by Dr. Muhammad Farooq, Graded Pathologist,

Armed Forces Institute of Pathology, for his cooperation in confirming our diagnosis.

REFERENCES

1. Charfi F, Ben Zina Z, Maazoun M, Kharrat W, Sellami D, Makni F, et al. *Phthiriasis pubis* palpebrarum in children. Diagnosis and treatment. *J Fr Ophthalmol* 2005; **28**:765-8.
2. Reddy SC. Phthiriasis palpebrarum. *Ind J Ophthalmol* 1980; **28**: 39-41.
3. Yoon KC, Park HY, Seo MS, Park YG. Mechanical treatment of phthiriasis palpebrarum. *Korean J Ophthalmol* 2003; **17**:71-3.
4. Ashkenazi I, Desatnik HR, Abraham FA. Yellow mercuric oxide: a treatment of choice for phthiriasis palpebrarum. *Br J Ophthalmol* 1991; **75**:356-8.
5. Siddiqui SA, Kadri WM, Aasi NA. Phthiriasis palpebrarum. *Pak J Ophthalmol* 1999; **15**:85-7.
6. Turow VD. Phthiriasis palpebrarum: an unusual course of blepharitis. *Arch Pediatr Adolesc Med* 1995; **149**:704-5.
7. Ittyerah TP, Fernandez ST, Kutty KN. Marginal keratitis produced by *Phthiris pubis*. *Indian J Ophthalmol* 1976; **24**:21-2.
8. Burkhart CN, Burkhart CG. Oral ivermectin therapy for phthiriasis palpebrarum. *Arch Ophthalmol* 2000; **118**:134-5.

.....★.....