

# Phthiriasis Palpebrum Manifestation in Eye: A Case Report

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## Abstract:

**Background :** Phthiriasis palpebrarum is a rare infestation of eyelid and eyelashes. It occurs due to phthiriasis pubis often named as crab lice.

**Case report :** An 8-year-old child presented to our institution with itching, burning sensation and lacrimation in the left eyelid near lid margins. Diffuse torch light examination revealed multiple white dots on the left upper eyelashes. On slit-lamp examination multiple nits attached to the base and shaft of the cilia were seen. The right eyelid and eye was absolutely normal. The patient was treated by mechanical removal of nits as possible followed by moxifloxacin eye ointment application. Patient was completely cured in 2 weeks.

**Conclusion :** Clinical findings similar to anterior seborrheic blepharitis should be carefully examined with a slit lamp to diagnose the etiology as Phthiriasis palpebrarum is frequently misdiagnosed as anterior blepharitis.

**Key words :** Phthiriasis palpebrarum, infestation, blepharitis

## Introduction :

Phthiriasis palpebrarum is a rare infestation of eyelid and eyelashes. It occurs due to phthiriasis pubis often named as crab lice. These lice primarily found in pubic hairs. Although, occasionally they can also infest skin and hairs of other body part but unilateral involvement of eyelid and eyelashes is very uncommon.<sup>1</sup> Sexual contact is the most typical mode of transmission however transmission can also occur through shared towels, sheets or clothes.<sup>2</sup> These infestations generally affects people of low socioeconomic strata, associated with poor hygiene and overcrowding.<sup>3</sup> The diagnosis can be made easily by the slit lamp examination, although misdiagnosis or delayed treatment can lead to blepharoconjunctivitis.

## Case report :

**Clinical presentation:** An 8-year-old child came to our institution presented with itching, burning sensation and lacrimation in the left eyelid near lid margins for one week. On external examination of left eye multiple white dots were seen at lid margin and upper eyelashes along with mild hyperemia and excoriation. On slit-lamp examination multiple translucent oval nits firmly clinging to the base and shaft of the cilia were seen. No adult lice were observed at the time of examination (Figure 1).

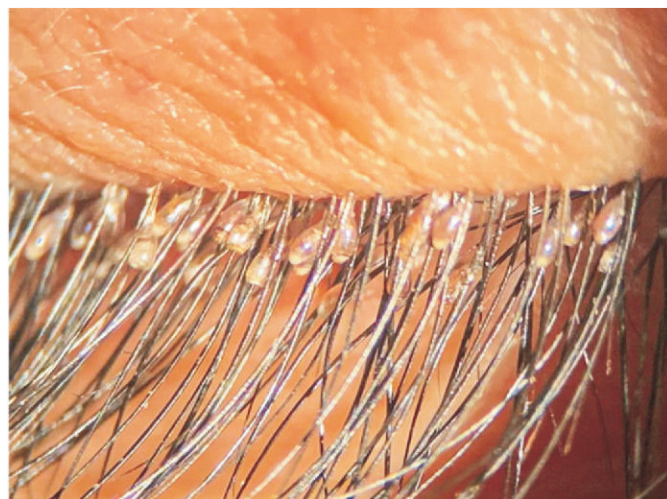


Figure 3 : The Phthiriasis Palpebrarum nits adhered to the eyelid

No discharge or congestion was noticed in the conjunctiva and anterior and posterior segments were normal. The right eye was absolutely normal. The visual acuity of the patient in both eyes (BE) was 20/20. Intraocular pressure was 17 mm Hg in both eyes. The patient was also sent for the dermatologist opinion and infestation was not found anywhere else. No history of any chronic systemic illness was present. Diagnosis of phthiriasis palpebrarum without secondary infection was confirmed. The family members of the patient were also examined but no one had the disease.

## Management :

Mechanical removal of as many nits as possible was done with

the help of forceps under topical anaesthesia. This was followed by moxifloxacin eye ointment application to the lid margin in ample amount three times per day. During the period of treatment and afterwards the patient was advised to avoid close body contact and not to share clothing and towels. Follow up was done on day 2 and then weekly. Patient was completely cured in 2 weeks.

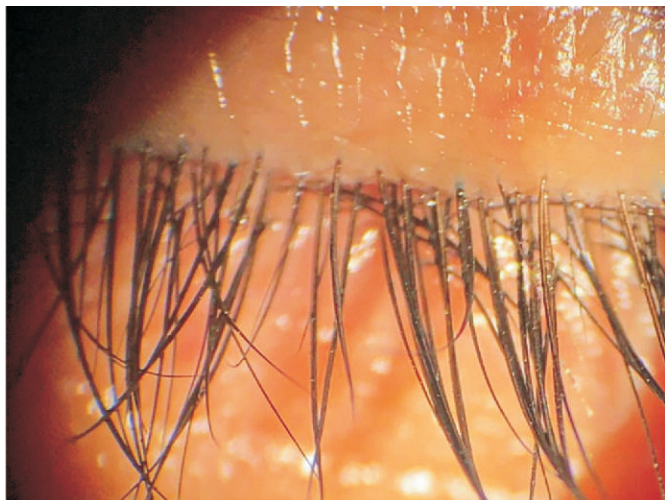


Figure 3 : treated eyelid of the same patient

#### Discussion :

Phthiriasis palpebrarum a rare infestation of the eyelashes with *Phthirus pubis* or crab louse commonly found in pubic hairs.<sup>4</sup> *Phthiriasis pubis* is an arthropod of the family Pedialidae and the genus *Phthirus*.<sup>5</sup> It is an obligate ectoparasite similar to *Pediculus humanus capitis* (head louse) and *Pediculus humanus corporis* (body louse). Morphologically it is different from other louse as second and third pair of legs and claws are stouter and powerful due to which they grasp hair shafts tightly.<sup>5</sup> The adult female louse lays 7–10 eggs/day. The nits hatched after 7–8 days and nymphs matures in 8–10 days.<sup>6</sup>

Patients infested with phthiriasis palpebrarum usually present with intense pruritus, lacrimation conjunctival inflammation, and sometimes preauricular lymphadenopathy because of secondary infection. The transmission of parasite from the pubic area to eyelashes probably takes place via hands, but reported eyelashes infestation can occur with out pubic

involvement as in our case.

Treatment include mechanical removal with forceps, eyelashes trimming, 20% fluorescein eye drops , physostigmine 25%, yellow mercuric oxide ointment 1%, pilocarpine gel, oral ivermectin and argon laser therapy or cryotherapy. Mechanical removal is the treatment of choice but complete removal in one sitting is not possible therefore we prescribed antibiotic eye ointment aswell. Cloths, towels and bedding used by the patient should be washed at with hot water and dried up in the sun.<sup>9</sup>

#### Conclusion :

Unilateral phthiriasis palpebrarum is a rare disease and easily misdiagnosed as blepharitis careful examination with slit lamp should be done to prevent secondary infection such as blepharoconjunctivitis . In multiple treatment modalities ,mechanical removal of nits along with antibiotic eye ointment application is the very effective option.

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