

Unilateral Isolated Phthiriasis Palpebrarum Infestation Masquerading as Chronic Seborrheic Blepharitis in an Adolescent

Priya Kapila*, Sudhir Salhotra and Babita Karothiya

MS Ophthalmology, Mela Mal Sood Rotary Eye Hospital, Palampur, Himachal Pradesh, India

Submission: February 10, 2025; Published: February 19, 2025

*Corresponding author: Priya Kapila, Consultant Ophthalmology, Mela Mal Sood Rotary Eye Hospital Palampur, Himachal Pradesh, India

Abstract

Phthiriasis palpebrarum is a rare cause of bilateral eyelid infestation mostly seen in children infested with phthiriasis pubis. It can masquerade as blepharitis if misdiagnosed and wrongly treated which may cause chronic morbidity for the patient. We report a rare case of unilateral phthiriasis palpebrarum in a 16-year-old boy that was being treated as a case of chronic blepharitis from past 6 months before the patient presented to us. Slit-lamp examination revealed an adult and a nit attached to the eyelashes. The mites were removed by involved eyelash epilation and the patient was given a course of topical antibiotic-steroid with strict lid hygiene. One week later the eye was free of any infestation and symptoms were completely resolved.

Keywords: Phthiriasis; Masquerade; Blepharitis; Epilation; Antibiotic-Steroid; Lid Hygiene

Introduction

Phthiriasis palpebrarum, also called phthiriasis ciliaris, is an obligate eyelid ectoparasite, caused by body infestation with Phthirus pubis or crab lice [1]. It is difficult to estimate the prevalence of this disease as these cases are underreported due to associated social barriers and stigmas. It is seen mostly in lower socio-economic localities with overcrowding and poor personal hygiene. The main causes of spread include fomites, contaminated clothing and sexual abuse especially in developing countries. Unilateral infestation of eyelids and eyelashes is very rare. If neglected, they can masquerade as chronic blepharitis or blepharoconjunctivitis [2]. We report a peculiar case of unilateral eyelid infestation in an adolescent that was masquerading as blepharitis from almost 6 months. A 16-year-old boy presented to our outpatient department (OPD) with symptoms of severe itching in left (OS) upper eyelid with irritation and photophobia from 6 months. The visual acuity both eyes (OU) was 6/6. Right eye (OD) was normal. OS examination revealed hyperaemia and excoriation of outer margin of upper eyelid with cylindrical matting of eyelashes and crusting at the base of follicles. There was minute ulceration on removal of crusts. On higher magnification, one live translucent adult louse partially embedded into the base of lashes and one live smaller in size nit firmly grasping the shaft

of some lashes was visible (Figure 1 and 2).

Rest of the ocular examination was unremarkable. The patient was under treatment elsewhere for blepharitis and chronic allergy and was given multiple courses of topical lubricants and anti-allergics. There was no history of similar infestation in any other family member. History of child abuse and infestation of genitalia and hair was also taken from the patient and attendant maintaining the code of ethics which was denied. He was sent for dermatological consultation to look for physical signs of infestation of other hairy body parts and the reports were normal. Manual removal of nit was done. Since the adult was firmly grasping the lash, manual epilation of the lash had to be done. The cylindrical matting of lashes with the appearance of adult confused the diagnosis between demodex and phthiriasis and hence the mite was sent for microscopy. The wet mount microscopic view confirmed it to be Phthiriasis pubis (Figure 3 and 4). The patient was prescribed chloramphenicol-hydrocortisone eye ointment for local application around the eyelashes of left upper lid including its outer margin. During the period of treatment, the patient was advised to maintain strict body hygiene and to avoid close body contact and sharing of clothing. On 1 week follow-up, the patient was completely free of any infestation and the symptoms had completely resolved.

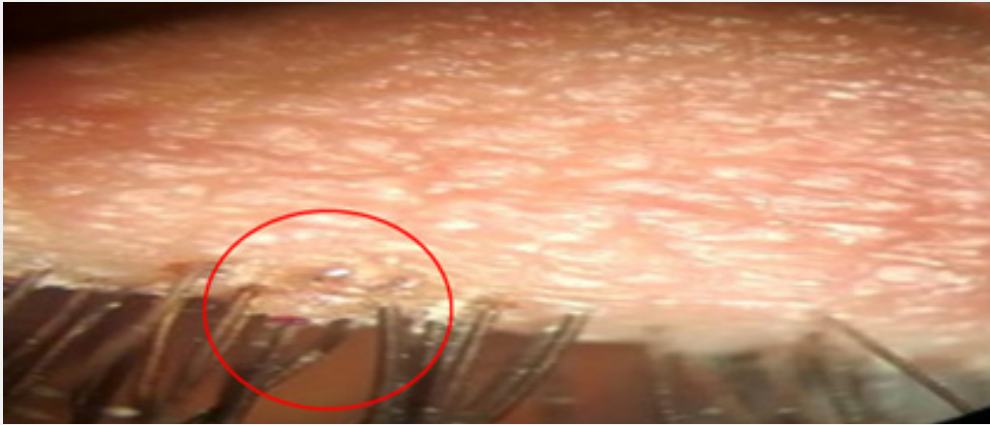


Figure 1: Translucent phthiriasis adult partially embedded at the base of eyelash with blepharitis.

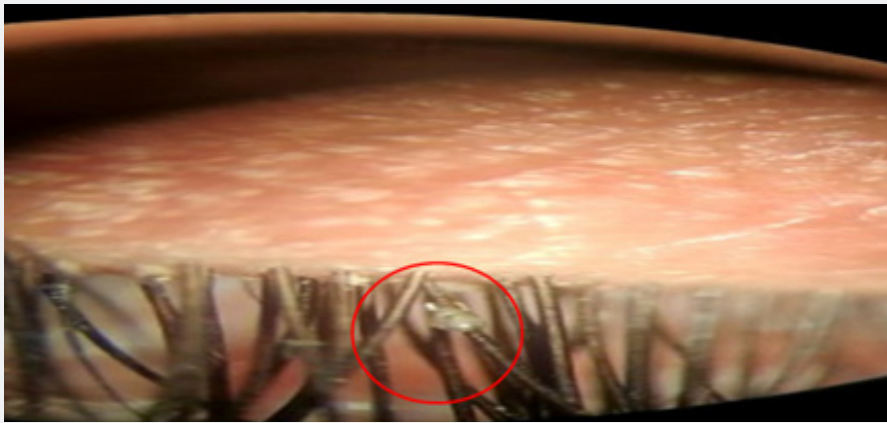


Figure 2: Phthiriasis nit seen with blepharitis.



Figure 3: Phthiriasis palpebrarum adult under compound microscope wet mount 10%.

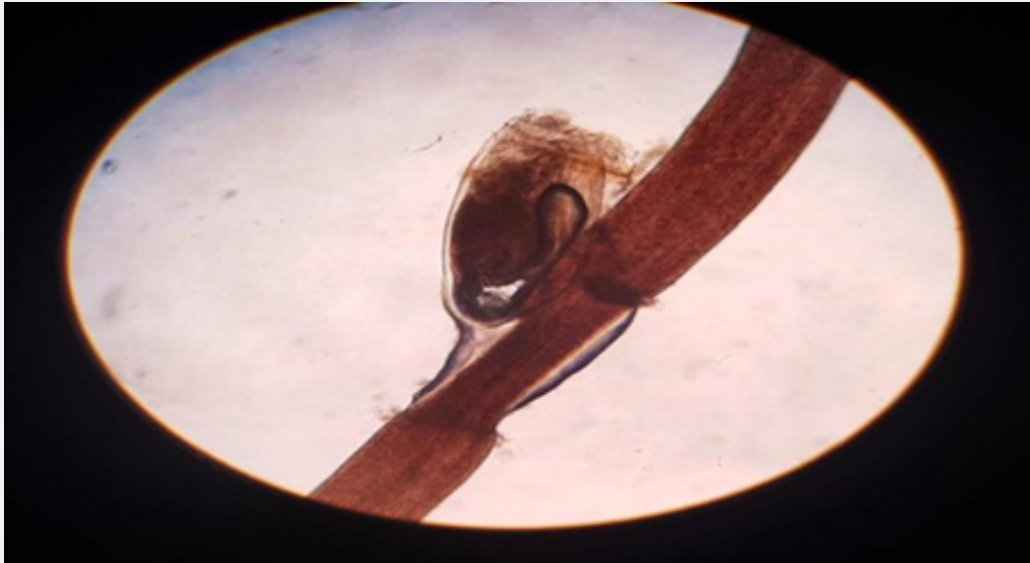


Figure 4: Phthiriasis palpebrarum nit under compound microscope wet mount 10%.

Phthiriasis palpebrarum is a rare cause of eyelid infestation that can masquerade as blepharitis. It is mostly seen in patients with pubic hair infestation caused by phthiriasis pubis. Morphologically it resembles the head and body louse except that *Phthirus pubis* (ciliary phthiriasis) has a crab-like round body with thick second and third sets of legs, having large claws allowing the parasite to cling to the pubic hair. However, it may spread out to other hairy areas such as axillary region, beard, eyebrows, and eyelashes [3,4]. The adult louse has a life span of 1 month during which the female lays 7-10 eggs/day. The eggs (nits) hatch in about 8 days mature in another 8 days [5]. The condition may go unrecognized for a long time that the parasite is very small in size and similar to the skin colour and not readily visible. If mistreated for a long duration, it mimics blepharitis. Rarely, lashes can be infested without pubic involvement. Blepharitis due to *P. pubis* is a rare condition especially so if it is unilateral but, nevertheless, cases have been reported in children one and half years of age [6]. The translucent oval nits which are located on the base of eyelashes and cilia are often confused with the crusty excretion of seborrheic blepharitis. The most common symptom is itching which is due to dermal hypersensitivity to the louse saliva which leads to inflammation and blepharitis [7]. The age of such masquerading infestation is mostly reported to be 1-1.5 years but in our case, the patient is a 16 year adolescent. Such cases in adolescent age group should give rise to the suspicion of child abuse [8]. Another peculiar finding is the isolated presence of phthiriasis palpebrarum without phthiriasis pubis. This is in itself a very rare finding reported previously by only Turow et al. [9].

Treatment varies from mechanical removal of lice with forceps, trimming of infested eyelashes, use of topical drugs:

0.3% tobramycin eye ointment, 0.5% moxifloxacin eye ointment, parasympathomimetic agents (4% pilocarpine gel), liquid vaseline, topical botulinum toxin, 20% fluorescein, and liquid petrolatum ointment [10]. Antibiotic eye ointments suffocate lice and their nits causing their death [11]. Oral ivermectin may be used as a single dose treatment. But it has its own side-effects as it can cross the blood-brain barrier and result in side effects for pregnant and lactating women [12]. Mechanical removal of nits is still the main modality of treatment [2,13,14]. A female louse lays an average of three nits daily, which hatch 7 to 10 days later [15]. Exponentially, our patient should have been grossly infested with lice at the time of presentation. Since he was on treatment for chronic allergy with blepharitis from past 6 months, this probably was the cause for the low amount of infestation compared to the chronicity of disease. General measures like body hygiene, washing all clothing at 50°C for half an hour and then heat drying for up to 10 minutes to eliminate both lice and nits should be undertaken to prevent re-infestation along with drug therapy.

Conclusion

Chronic eyelid infestation can masquerade as blepharitis if under-treated and misdiagnosed. Vigilance in distinguishing the mite from eyelid margin is the key to targeted treatment. Though phthiriasis is considered an infestation of eyelid along with some form of phthiriasis pubis co-infestation, we hereby have reported this case of a 16-year-old adolescent with unilateral isolated phthiriasis palpebrarum. Overtreatment can further lead to increased dryness and irritation in such patients hence simply maintaining strict body hygiene and a course of topical antibiotic-steroid suffices for relief. Also, awareness about child abuse and proper guidance for such patients is a moral duty whenever we come across such a case.

Patient Consent

An informed consent was taken from the patient. No data has been mentioned that could reveal the identity of the patient.

References

1. Rundle PA, Hughes DS (1993) Phthirus pubis infestation of the eyelids. *Br J Ophthalmol* 77(12): 815-816.
2. James Pinckney 2nd, Patrick Cole, Sangita Patel Vadapalli, Ted Rosen (2008) Phthiriasis palpebrarum: a common culprit with uncommon presentation. *Dermatol Online J* 14(4): 7.
3. Gupta M, Gupta A (2016) Phthiriasis palpebrarum masquerading as seborrheic blepharitis. *Australas J Dermatol* 57(4): e139-e140.
4. Bose J (1955) Phthiriasis palpebrarum. *Am J Ophthalmol* 39(2 Pt 1): 211-215.
5. Rook A, Wilkinson DS, Ebling FJG (1972) *Text book of dermatology* Oxford: Blackwell 1(46): 1384-1389.
6. Goldman L, Friedman LS (1941) Infection of scalp and cilia with Phthirus pubis in a nineteen-month-old baby. *Am J Dis Child* 61: 344-346.
7. Duke Elder S (1974) *Ocular adnexa, Vol XIII, Part-I, diseases of eye lids, system of ophthalmology*. London: Henry Kimpton 13: 195-199.
8. Ryan MF (2014) Phthiriasis palpebrarum infection: a concern for child abuse. *J Emerg Med* 46(6): e159-162.
9. Turow VD (1995) Phthiriasis palpebrarum: an unusual cause of blepharitis 149(6): 704-705.
10. Ashraf M, Waris A, Kumar A, Akhtar N (2014) A case of unilateral phthiriasis palpebrarum infestation involving the left eye. *BMJ Case Rep* 2014: bcr2013203307.
11. B Kiran, SA Kareem, V Illamani, S Chitralekha (2012) Case of phthiriasis palpebrarum with blepheroconjunctivitis. *Indian J Med Microbiol* 30(3): 354-356.
12. Dredge JH, Winter TW, Alset AE (2019) Phthiriasis Palpebrarum Treated with Oral Ivermectin. *Ophthalmology* 126(6): 791.
13. Jiang J, Shen T, Hong CY (2011) A peculiar case of eye pruritus: phthiriasis palpebrarum initially misdiagnosed as common blepharitis. *Int J Ophthalmol* 4(6): 676-677.
14. Yen-Ching Lin, Shu-Ching Kao, Hui-Chuan Kau, Wen-Ming Hsu, Chieh-Chih Tsai (2003) Phthiriasis palpebrarum: an unusual blepharoconjunctivitis. *Chin Med J* 65(10): 498-500.
15. Padhi TR, Das S, Sharma S, Rath S, Rath S, et al. (2017) Ocular parasites: A comprehensive review. *Surv Ophthalmol* 62(2): 161-189.



This work is licensed under Creative Commons Attribution 4.0 License
DOI: [10.19080/JOJ.2025.12.555833](https://doi.org/10.19080/JOJ.2025.12.555833)

Your next submission with Juniper Publishers will reach you the below assets

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats (**Pdf, E-pub, Full Text, Audio**)
- Unceasing customer service

Track the below URL for one-step submission
<https://juniperpublishers.com/online-submission.php>