A Case of an Exceptional and Infrequent Reason of Blepharoconjunctivitis: Phthiriasis Palpebrarum

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ÖZET


Anahtar kelimeler: Konjonktivit; Blefarit; Bit; Kirpik biti

ABSTRACT

Phthiriasis Palpebrarum is an infrequent and uncommon eyelid infestation caused by phthirus pubis. In this study, we report a case of phthiriasis palpebrarum imitating allergic blepharoconjunctivitis. A 58-year-old female patient had itching, stinging and watering together with temperate crust around her right eyelid. Initially the diagnosis of allergic conjunctivitis was made because of symptoms of hyperemia, mucoid secretions and itching on the lashes and anti-allergic eye drop was prescribed. On the attentive biomicroscopic examination, it was revealed many buried live lice attached to the lashes, hyperemia on the lid margin and translucent nits in right eyelid. Microscopic examinations of samples taken from the lashes infested with live lice and translucent nits were consulted to microbiology department for certain diagnose and to dermatology department for scanning phthiriasis and other veneral diseases. Administration of pure vaseline, topical antibiotic drops and topical steroid drops were used for the treatment. At the end of the third week, no louse or nit was present. In spite of it was known that Phthiriasis palpebrarum is an exceptional and infrequent reason of blepharoconjunctivitis; it might observe as an isolated infestation of eyelids and this condition can easily be misdiagnosed as an allergic conjunctivitis or blepharitis.

Keywords: Conjunctivitis; Blepharitis; Phthirus; Phthiriasis Palpebrarum
INTRODUCTION
Phthiriasis palpebrarum is an infestation of eyelids reasoned by phthirus pubis or crab lice (1). Public lice infestation contribute to 1 – 2 % of total human population worldwide (2). In spite of pubic hair is the main habitat of this infestation, these lice are quite often found on the hairs of abdomen, thighs and in the axilla. Rarely they may invade the eyebrows and eye lashes (3). Mode of transfer to these areas is by hand after contact with the public region. Phthirus pubis infestation is connected with poor hygiene and overcrowding in general and is more often in the sexually active age group of 15 – 45 years. Route like sexual and close physical contacts in families cause spread of infestation (4,5).

CASE REPORT
A 58-year-old female patient with no systemic disease was admitted to the ophthalmology outpatient clinic of our hospital with complaints of recurrent itching, stinging and watering for 2 months. Previously, she was treated with topical anti-allergic eye drops with no remission of symptoms. In the course of inspection of the periorbital regions; due to findings similar to exfoliative dermal lesions, skin redness and mucoid secretions over the eyelashes; attention was paid to lid eczema and blepharitis in the diagnosis. (Figure 1).

Visual acuity of patient was 20 / 20 in both eyes. Slit – lamp biomicroscopic examination revealed many buried live lice attached to the lashes, hyperemia on the lid margin and translucent nits in right eyelid. Except to this; In both eyes the anterior segment and fundus examination was normal and the intraocular pressure was measured 16 mmHg with Goldmann applanation tonometry.

Mechanical removal of all the eyelashes of the right eye for the treatment was not performed. Only a few samples taken from the lashes during biomicroscopic examination were consulted to the department of microbiology for definitive diagnosis.

![Figure 1: Many buried live lice attached to the lashes, hyperemia on the lid margin and translucent nits in eyelid.](image-url)
In addition, a consultation from the department of dermatology was requested for scanning phthiriasis and other venereal diseases. The patient was advised on improvement of personal hygiene, taking care of close contacts and how to prevent re-infection. She was treated with fusidic acid % 1 viscous eye drop two times a day, fluorometholone % 1 ophthalmic drop three times a day and pure vaseline which is a compound of the petrolatum three times a day. The same treatment was continued during 1 month period. On the third day, patient’s complaints of itching, stinging and watering were relieved. Significant reduction in the amount of lice and their nits (eggs) was observed in the first week. Two weeks later; the eyelashes were clear of all lice and nits. The patient was followed-up once in every 7 days for 2 months. There was complete cure without any recurrence.

DISCUSSION

Phthirius pubis or crab lice which are bloodsucking insects are found most frequently in the inguinal area, but can also take place in the chest hair, axillae, eyelashes and eye-brows. In general, cases with genital infestation of isolated palpebral involvement have been described (6). Phthirius pubis belongs to the phylum Arthropoda, the class Insecta, the order Phthiraptera also called Pediculosis pubis, Pubic louse and Crab louse. Adult pubic louse is a 1 – 2 mm in size with a wingless, broad and flat translucent body through which freshly ingested blood meal can be visualized. The body is crab like and divided into head, thorax and abdomen. It has three pairs of short, stout legs. By its powerful claws, pubic louse can grasp tightly to hair shafts. Life span is around 1 month, passing through three stages: Nits to Nymph to Adult. Without a host, it can not survive for more than 1 day (7). It’s difficult to remove the lice due to its translucency and deep burrowing in the lid margin. On the other hand by attentive and prolonged examination with biomicroscop, parasite’s slow movement can be observed by the physician (1, 8, 9). It’s known that Phthiriasis palpebrarum is an uncommon reason of blepharconjunctivitis and is diagnosed chiefly in children. At the region of lice bite, conjunctival inflammation, preauricular lymphadenopathy and secondary infection may also be observed (10, 11, 14). In our case, we observed conjunctival hyperemia, pruritus of the right eyelid, mucoid secretions and buried lice into the base of the right eyelash or follicles. As soon as the diagnosis is made, we started the medical treatment urgently to prevent extension of disease. The patient was also advised on improvement of personal hygiene and referred to both department of microbiology and dermatology for further evaluation.

Infestation with Phthiriasis palpebrarum is usually associated with poor hygiene in an overcrowded environment. Hence, it’s recommended that within two or three days of the start of treatment; clothing, towels and bedding used by the patient should be mechanically washed (with water at least 55 celcius degree) and dried on the hot cycle for 5–10 minutes. Items that cannot be washed should be dry cleaned or stored in a sealed plastic bag for at least two weeks (12).

As a medical treatment, fusidic acid % 1 viscous eye drop two times a day, fluorometholone % 1 ophthalmic drop three times a day and pure vaseline which is a compound of the petrolatum three times a day were applied in our case. Previously reported treatments for phthiriasis palpebrarum include plucking the eyelashes, mechanical removal of the lice with fine forceps, cryotherapy, argon laser photocoagulation, fluorescein eye drops 20 %, physostigmine 0.25 %, lindane 1 %, pure vaseline (petroleum jelly 100 %), yellow mercuric oxide 1 %, malathion drops 1 % or shampoo 1 %, oral ivermectin and pilocarpine drops 4 % (11,13).

We continued our treatment protocol for one month period. On the third day, relief of itching, stinging and watering owing to patient were occurred. Significant reduction in the amount of lice and their nits (eggs) was observed in the first week. Two weeks later; the eyelashes were clear of all lice and nits. The patient was followed-up once every 7 days for 2 months. There was complete cure without any recurrence. Pure vaseline was preferred in our treatment due to its characteristics such as having no systemic adverse effects, being cheap and obtainable, effective in eradicating lice.

In conclusion, phthiriasis palpebrarum infestation is
commonly misdiagnosed as allergic, viral or bacterial conjunctivitis. Detailed patient history and attentive examination are crucial for accurate diagnosis and appropriate treatment. Besides that, in cases with resistant and prolonged blepharoconjunctivitis; phthiriasis palpebrarum infestation always should be kept in mind.

REFERENCES