

A Case of Eyelash and Eyebrow Phthiriasis

Kaş ve Kirpik Phthiriasis’li Bir Olgu

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ABSTRACT Phthiriasis palpebrarum is a rare disease in which crab lice infest the eyelashes. In this article we report a case of eyelash and eyebrow lice infestation presented with chronic blepharoconjunctivitis. A 27-year-old woman applied complaints with itching, redness, and irritation of eyelid margins in her eyes for 3 months. Biomicroscopic examination revealed chronic blepharoconjunctivitis. But with careful inspection the lice and their nits were determined on her eyelashes and eyebrows. We mechanically removed the lice and nits meticulously by pulling with fine forceps under biomicroscope. She was treated with pilocarpine hydrochloride 4% drops applied four times daily for two weeks. After the treatment all lice and nits were eradicated. Phthiriasis palpebrarum may be confused with blepharitis. Diagnosis can be confirmed by carefully biomicroscopic examination of the lice and their nits.

Key Words: Blepharitis; eyelashes; eyebrows

ÖZET Phthiriasis palpebrarum kirpiklerin bitler tarafından istila edildiği nadir bir hastalıktır. Bu makalede kronik blefarokonjunktivit şeklinde kendini gösteren kirpik ve kaş bit enfestasyonu olgusunu bildirmektedir. Yirmi yedi yaşında kadın hasta 3 aydır devam eden batma, kızarıklık ve kapak kenarlarında tahriş şikayetleri ile başvurdu. Biyomikroskopik muayene kronik blefarokonjunktiviti göstermekte idi. Ancak dikkatli araştırma ile hastanın kirpik ve kaşlarında bitler ve bunların sirkeleri tespit edildi. Biyomikroskop altında ince bir forseps ile titiz bir biçimde bitleri ve sirkelerini mekanik olarak uzaklaştırdık. Hasta 2 hafta süresince günde 4 defa %4 pilocarpine hydrochloride damla ile tedavi edildi. Tedavi sonrası tüm bitler ve sirkeleri ortadan kaldırıldı. Phthiriasis palpebrarum blefaritlerle karıştırılabilir. Tanı bitlerin ve sirkelerinin dikkatli biyomikroskopik muayenesi ile doğrulanabilir.

Anahtar Kelimeler: Blefarit; kirpikler; kaşlar

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Pediculosis, infestation by the *Pediculus corporis* and *Pediculus capitis*, and phthiriasis, infestation by the *Phthirus pubis* (crab louse) occur in humans when sanitary practices are inadequate.¹ Among them *Phthirus pubis*, which causes pediculosis pubis, infests mainly the hair of the pubic and inguinal regions.² Although pubic hair is their main habitat, 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 (phthiriasis palpebrarum).³

In this article we report a case of eyelash and eyebrow lice infestation presented with chronic blepharoconjunctivitis.

CASE REPORT

A 27-year-old woman applied complaints with itching, redness, and irritation of eyelid margins in her eyes for 3 months. In another center she was diagnosed as chronic blepharitis and treated with oral doxycycline, artificial tear drops, topically steroids and antibiotics for two months. Since her complaints did not alleviate, she applied to our hospital. On presentation, her best-corrected visual acuities were 20/20 in both eyes. The intraocular pressures were within normal limits. Fundus appearance was normal. Biomicroscopic examination revealed chronic blepharoconjunctivitis (Figure 1). But with careful inspection the lice and their nits were determined on her eyelashes and eyebrows (Figure 2). We mechanically removed the lice and nits meticulously by pulling with fine forceps under microscopy (Figure 3). After informed consent was obtained from the patient, she was treated with pilocarpine hydrochloride 4% drops applied four times daily for two weeks. The patient was referred to Dermatology Department for examination of other body areas and evaluation of any sexually transmitted diseases.

DISCUSSION

Pediculosis is transmitted by close contact with an infested individual or by contaminated clothing, upholstery and bedding.⁴ Phthiriasis, on the other

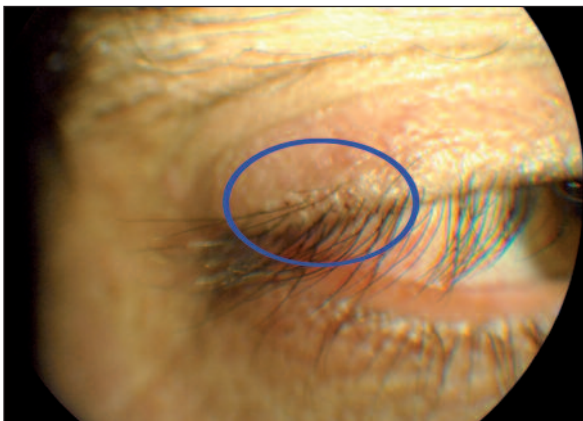


FIGURE 1: Lid margin appearance of the patient mimicking the lid eczema and blepharitis.

(See for colored form <http://oftalmoloji.turkiyeklinikleri.com/>)

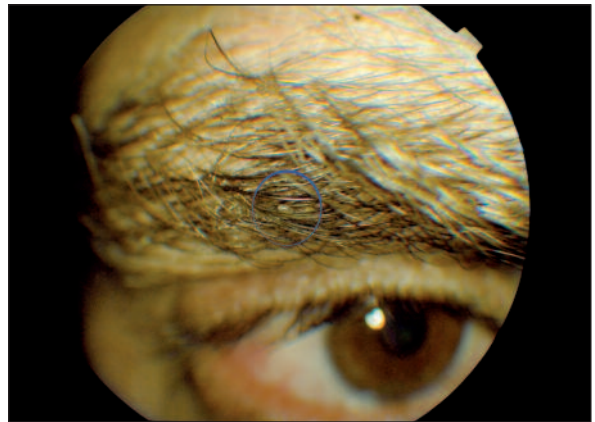


FIGURE 2: One nit is seen on the eyebrow.

(See for colored form <http://oftalmoloji.turkiyeklinikleri.com/>)

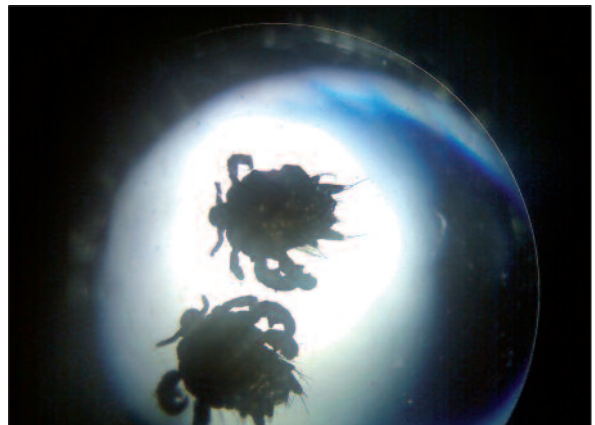


FIGURE 3: Microscopic view of two lice removed from patient.

(See for colored form <http://oftalmoloji.turkiyeklinikleri.com/>)

hand, is typically transmitted by sexual contact.¹ The parasite probably reaches the eye by transmission between the hand and the pubic hair. Occasionally the lashes are infested without pubic involvement.³

The lice are difficult to identify because of their semi-transparency and deep burrowing in the lid margins.² On cursory examination the translucent oval nits which locate into the bases of the eyelashes and on the cilia are often confused with the crusty excretions of seborrheic blepharitis.⁵ For these reasons the infestation may have been existed for along time before being recognized. Clinical characteristics of phthiriasis palpebrarum include itching and irritation of the eyelid margins, typical of blepharoconjunctivitis. Presence of nits on the

eyelashes and adult parasites in their roots are distinctive features of this entity.¹

Since about one third of patients with phthiriasis palpebrarum have other sexually transmitted diseases, venereal investigation is mandatory.⁶ Effective management of phthiriasis palpebrarum requires thorough investigation and treatment of contacts, delousing of the patient, other family members, clothing, and bedding.⁴ Treatment of phthiriasis palpebrarum is difficult and varied. Mechanical removal of eyelashes, lice and nits on the eyelashes may eradicate the lice since the hair habitat is essential for crab louse survival and reproduction.² It has shown that 1% mercuric oxide ointment is both safe and effective for treatment of phthiriasis palpebrarum.⁷ In a study it was reported that argon laser phototherapy is effective and quick method of treating phthiriasis palpebrarum in one sitting. A beam at a setting of 200-microns size, 0.1 second time, and 200 mW power was employed to destroy individual adult parasites and nits.⁸ Application of twenty percent fluorescein solution, vase-

line on the eyelid margins and cryotherapy have been reported to be effective.⁹⁻¹¹ Karalezli and colleagues treated a child patient by using 50% diluted vinegar with pure vaseline.¹² They applied vaseline to the eyelashes three times a day and 50% diluted vinegar twice a day. Vinegar easily separated the attached nits from the hair shafts owing to its keratolytic effect.

We mechanically removed the lice and nits by pulling with fine forceps under biomicroscope and applied pilocarpine hydrochloride 4% four times daily for two weeks. Although the exact mechanism of action of topical pilocarpine is not clearly known, it might be due to its direct cholinergic action causing paralysis of the lice or to its direct pediculicidal action.⁵

In conclusion, phthiriasis palpebrarum should be considered in the differential diagnosis of resistant blepharoconjunctivitis. Diagnosis can be confirmed by carefully biomicroscopic examination of the lice and their nits.

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