

Case Report

Unilateral phthiriasis palpebrarum infestation in a child during occlusion therapy for amblyopia: Case report



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Abstract

An 8-year-old mentally retarded boy is brought to the hospital because of itching and burning at his right eye for 10 days. He was on full time right eye occlusion therapy for left amblyopia. Slit lamp examination revealed nits and adult lice anchored to the eyelashes in his occluded eye. Eyelashes and all detected lice and nits were mechanically trimmed, and sent for parasitological examination, which confirmed the diagnosis. Upon familial evaluation for additional infestation, the father was also found to have genital phthiriasis pubis and received appropriate treatment. While phthiriasis palpebrarum in children may signify sexual abuse, a detailed investigation by a child psychiatrist was performed and revealed no sign of abuse. Since the infestation was at only on occluded eye, the most possible explanation for the transmission was evaluated as the misuse of the adhesive patch in our case. In conclusion, sexual abuse should be excluded in children with phthiriasis palpebrarum and parents of amblyopic children on occlusion therapy should be warned about the importance of the hygiene of the patching in order to avoid any kind of infection and infestation.

Keywords: Amblyopia, Occlusion therapy, Phthiriasis palpebrarum, Phthiriasis pubis, Sexual abuse

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Introduction

Phthiriasis palpebrarum, which usually occurs by phthiriasis pubis infestation of the eyelids, is a rare condition usually associated with poor hygiene.^{1–4} A misdiagnosis as blepharitis is common in these patients.^{2,5,6} It is mostly passed on by sexual contact or close physical contact.^{1,2,7–9} Sexual abuse probability should be kept in mind especially in children.^{7,8} Whenever a child is diagnosed as phthiriasis palpebrarum, contact with a phthiriasis pubis infested adult should be investigated and sexual abuse should be excluded.¹⁰

We hereby report a case of unilateral phthiriasis palpebrarum as a consequence of occlusion therapy for amblyopia.

Case report

An 8-year-old mentally retarded boy with left congenital ptosis and related astigmatic amblyopia was admitted to our clinic for itching and burning of the right eye for 10 days. Best corrected visual acuity was 0.6 on the right and 0.3 on the left eye. He was on full time right eye occlusion therapy for left amblyopia. A careful slit lamp examination showed multiple nits (Fig. 1a and b), and adult lice (Fig. 2) anchored to the eyelashes in his occluded eye. The conjunctiva of the right eye was hyperemic, however no secretion or corneal involvement was present. No additional infestation in the other parts of the body was detected including the other

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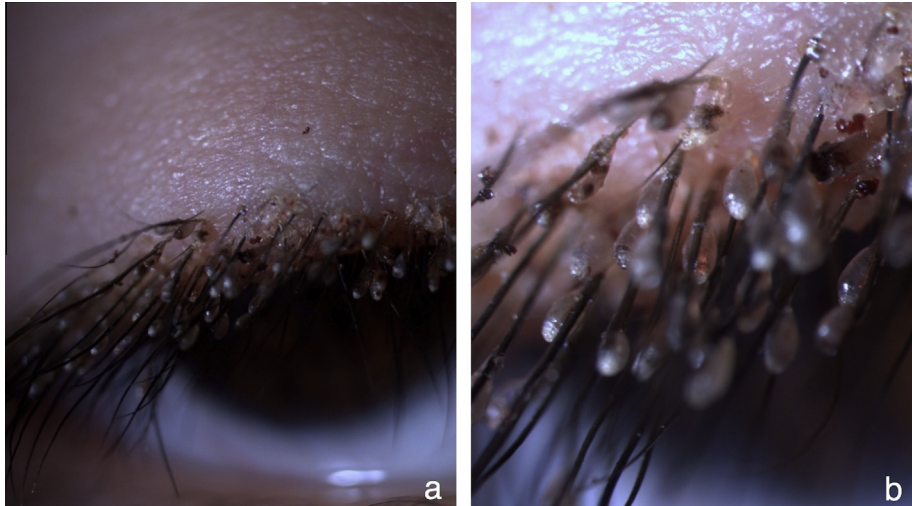


Figure 1. Slit-lamp photography of the nits that are anchored to the eyelashes (a), with a higher-magnification (b).

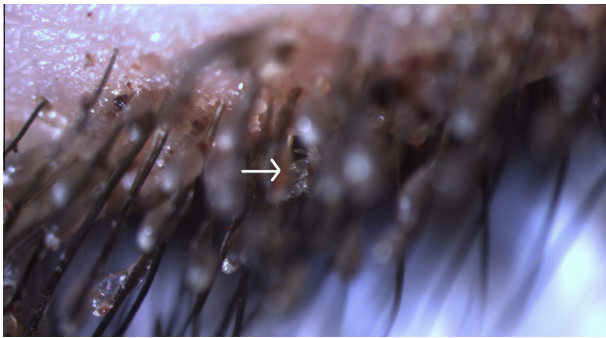


Figure 2. Adult lice (white arrow) anchored to the eyelashes.

eye. Eyelashes and all detected lice and nits were mechanically trimmed, and sent for parasitological examination. Parasitological examination revealed adult forms and nits of phthiriasis pubis.

As all detected parasites were mechanically removed, no other treatment was performed. The examination of all family members showed that the father was also infested with phthiriasis pubis and received appropriate treatment. Since phthiriasis pubis infection of the eyelids, especially in children, may represent sexual abuse, detailed investigation by a child psychiatrist was performed and revealed no sign of sexual abuse.

Discussion

Phthiriasis palpebrarum, which generally emerges by phthiriasis pubis infestation of the eyelids, is a rare condition usually associated with poor hygiene.¹⁻⁴ In our case, mild mental retardation and inadequate self-care might have caused insufficient hygiene. A misdiagnosis as blepharitis is common in these patients.^{2,5,6} Eyelashes that have the right temperature and the moist specialties are the most common phthiriasis pubis infestation areas in children who

do not have terminal hairs on their body.⁹ Transmission is mostly related to close contact but also sharing clothing, towels and bedding with someone who is infected can result with infestation.^{7,10} In children, parasite usually transmitted by direct passage from the axillary or chest hair of the parents.¹¹ Therefore, whenever a child is diagnosed as phthiriasis palpebrarum, contact with a phthiriasis pubis infested adult should be investigated.¹⁰ Although it is not common, direct contact during a sexual abuse can also be the origin of phthiriasis palpebrarum in a child.^{7,8,10} Although most of the authors indicate that sexual abuse should be excluded in every child with phthiriasis palpebrarum, according to our publication search, we could find only a case report, which confirms sexual abuse in a 4 years old child with phthiriasis palpebrarum.¹⁰ Since pediatric phthiriasis palpebrarum may represent sexual abuse, the origin of the infection should be determined and in case of any suspicion, child protective services should be notified to ensure child safety.¹⁰ Infestation may be unilateral or more often bilateral. In our case, the only affected eye was the one that was on occlusion therapy. Hence, the most possible explanation of the transmission is the misuse of the adhesive patch. A detailed history revealed that the same patch was being used several times until the adhesiveness disappears. Mechanical removal of all detected lice and nits is the first choice of treatment and usually sufficient in patients without recurrence as in our case. In rare refractory cases further treatment options such as fluorescein eye-drops 20%, and pilocarpine gel 4%, argon laser photocoagulation, cryotherapy or oral ivermectin might be necessary.^{2,3,6}

As a conclusion, parents of amblyopic children on occlusion therapy should be warned about the importance of the hygiene of the patching in order to avoid any kind of infection and infestation.

Conflict of interest

None.

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