

Clinical & Refractive Optometry is pleased to present this continuing education (CE) article by Dr. Ron Melton and Dr. Randall Thomas entitled **Phthiriasis Palpebrarum**. In order to obtain 1-hour of COPE-approved CE credit, please refer to page 376 for complete instructions.

Phthiriasis Palpebrarum

Ron Melton, OD; Randall Thomas, OD

SUBJECTIVE

A 6-year-old female presents with itching and rubbing of her eyes for the past week. Her mother has noticed no significant redness or drainage from the eyes.

OBJECTIVE

- Visual acuity (VA): 6/6 (20/20) OU
- Lids: have 3+ nits (louse egg cases) and mild reddish/brown sanguinofecal debris along the base of the eyelashes (Fig. 1)
- Conjunctiva, cornea, anterior chamber are all quiet OU

ASSESSMENT

- Phthiriasis palpebrarum OU

PLAN

- Use forceps to remove lice at slit lamp
- Lid scrubs b.i.d. OU
- Copious erythromycin ophthalmic ointment b.i.d. to lid margins
- Consult with patient's pediatrician for possibility of ocular manifestation of systemic infection
- Look for any indication of child abuse
- Recheck 7 days with lashes pristine

Comments: When *Phthirus pubis* (crab louse) or nits (louse egg cases) are found, the therapeutic goal is to eliminate the organism from the eyelashes. Lid scrubs help in this process. Any remaining organisms can be suffocated with any ophthalmic ointment. Erythromycin was chosen here because it is gentle on the ocular surface

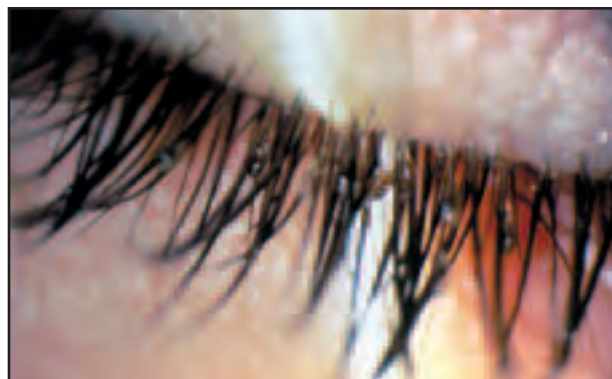


Fig. 1 Crab lice infestation, their excrement mixed with blood and egg cases, are seen attached to the cilia.

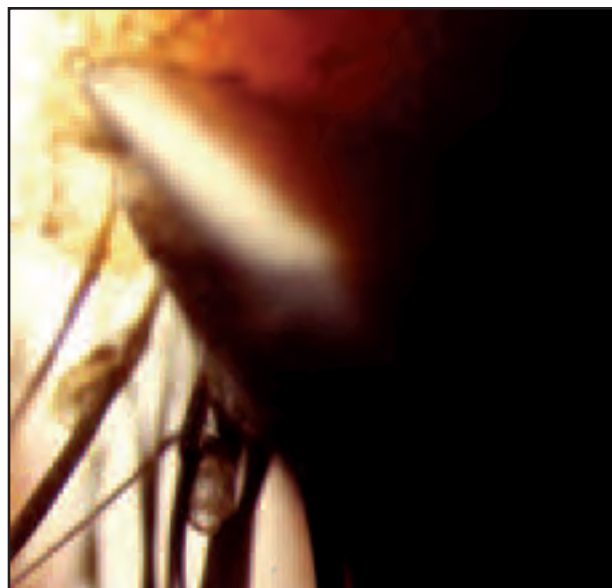


Fig. 2 Close-up of crab lice being removed manually from the lashes with tweezers. Note the nits below and to the left of the tweezers.

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when some of the residual ointment gets into the eye. A heavy coat of the ointment b.i.d. for 7 days should eliminate any living crab lice.

When this condition is seen in children, the possibility of child abuse should be considered. In adults, the mode



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QUESTIONNAIRE

Phthiriasis Palpebrarum

Ron Melton, OD; Randall Thomas, OD

1. Which one of the following statements about phthiriasis palpebrarum is **TRUE**?
 - It occurs more commonly among males than females
 - It occurs more commonly among sexually active adults
 - It is a common form of blepharitis
 - It always has an effect on visual acuity
2. Which one of the following statements is **TRUE**?
 - Lid scrubs are standard
 - Lice may be spread through close physical contact
 - Nits are commonly seen on eyelids
 - All of the above
3. Which of the following does not describe phthiriasis palpebrarum?
 - The crab louse has a broad body
 - Adult transmission is unrelated to sanitation or other living conditions
 - The crab louse has two short front paws and four broad hind legs with little claws
 - In adults, the mode of transmission can be venereal
4. Which of the following statements about the condition is **FALSE**?
 - It is an uncommon form of blepharitis
 - Contrary to popular assumption, the presence of phthiriasis palpebrarum is not related to child abuse
 - Pediculus capitis (head louse) is a form of lice
 - Pediculus corporis (body louse) is a form of lice

5. Which of the following statements is **TRUE**?
 - The goal of therapy is elimination of the organism from the eyelashes
 - Following lid scrubs, remaining organisms can be suffocated with ophthalmic ointment
 - Forceps can be used to remove lice at slit lamp
 - All of the above

6. Which of the following statements does **NOT** describe the treatment plan in this case?
 - Copious erythromycin ophthalmic ointment b.i.d. to lid margins
 - Lid scrubs
 - Non-steroidal anti-inflammatory drugs to reduce inflammation
 - Seven-day course of ophthalmic ointment

7. Which of the following statements is **FALSE**:
 - Inflammatory conjunctivitis may be present
 - The most common presenting symptom is itching (pruritus)
 - Infected body hair other than eyelashes may be treated with permethrine 1% (Nix lotion, Zalvor cream)
 - The most common presenting symptom is redness

8. Which one of the following statements is **FALSE**?
 - The primary goal of therapy is to prevent ocular trauma
 - The organisms are difficult to see because they blend into the eyelid skin
 - The lice live on the blood sucked from their hosts
 - Reddish/brown sanguinofecal debris are classic slit-lamp findings

9. Which one of the following statements is **FALSE**?
 - Lice can only survive on humans
 - Infection may occur after close physical contact with family members
 - Lice can be transmitted back and forth between animals and humans
 - Louse egg cases are often found together with nits

10. Which of the following statements is **TRUE**?
 - Crab lice excrement is often seen attached to the cilia
 - Permethrine 1% (Nix lotion, Zalvor cream) is recommended in a single application
 - Reddish/brown sanguinofecal debris result from capillary rupture and defecation
 - All of the above

of transmission can be venereal or the result of poor living conditions, or both.

GENERAL OBSERVATIONS

- Phthirus pubis (crab louse) eyelid infestation. Other forms of lice are pediculus capitis (head louse) and pediculus corporis (body louse)
 - Lice can only survive on humans and not on animals (host-specific)
 - Phthiriasis pubis contracted by close physical contact or common use of towels or clothing
 - Most common in sexually active adults
 - Child may be infected after close physical contact with family members. The infection could possibly indicate sexual abuse
 - Crab louse has broad body with two short front paws and four broad hind legs with little claws
 - An uncommon form of blepharitis
 - There can sometimes be an accompanying inflammatory conjunctivitis
 - Itching (pruritus), often intense, is the most common presenting symptom
- Nits (louse egg cases) and reddish/brown sanguinofecal debris at the base of the eyelashes are classic slit-lamp findings and result from capillary rupture and defecation as the organisms move along the eyelid margins. The lice live on the blood sucked from their hosts.
 - The organisms can be difficult to see because they tend to blend into the eyelid skin
 - Treatment includes removing the lice and nits manually with tweezers (Fig. 2) followed by heavy application of an ophthalmic ointment b.i.d. to the lashes for 1 to 2 weeks. The ointment suffocates any remaining lice and nits.
 - Other infected body hair may be treated with a single application of permethrine 1% (Nix lotion, Zalvor cream).

Disclaimer: Not every detail of every case is discussed, rather the key clinical findings are described. For example, if nothing is said about the corneal status, you should assume that the cornea is normal, etc. When vision is recorded, it should be assumed to be best corrected or pinholed. Regarding therapy, we show how we treated the particular case. Given that medicine is an art, as well as a science, therapy will — and often does — vary with each unique patient presentation depending on severity, known drug allergies, prior treatment, response to therapy, etc.