

Case Report

Phthiriasis palpebrarum: a diagnosis of keen observation and suspicion

Muthu Bharathi Sivasubramanian, Ramachandran Ramakrishnan*, Murali Narasimhan

Department of Dermatology, Venereology and Leprosy, SRM Medical College Hospital and Research Centre, Potheri, Chennai, India

Received: 12 November 2019

Revised: 17 January 2020

Accepted: 18 January 2020

***Correspondence:**

Dr. Ramachandran Ramakrishnan,
E-mail: dram.srkn@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Phthiriasis palpebrarum is a rare cause of eyelid infestation and it mimics seborrheic blepharitis. A 60 year old female presented with itching in the eyelids and scalp. On initial examination scaling was present in her eyelashes and eyelid margin. On further examination some movements were noticed in her eyelashes. Immediately, dermatoscopic examination was done and was found to have multiple nits and multiple crab lice over her eyelashes. She was treated with oral ivermectin and trimming of eyelashes as advised by ophthalmologist. She improved in a week. Thus phthiriasis palpebrarum can mimic seborrheic blepharitis and therefore high index of suspicion and detailed examination is necessary for appropriate diagnosis

Keywords: Dermatoscope, Eyelashes, Phthiriasis

INTRODUCTION

Phthiriasis pubis is a louse infestation caused by phthirus pubis, also known as crab louse, commonly involving pubic hair.¹ Phthiriasis palpebrarum is an infestation of the eyelashes by the same ectoparasite. Lice are highly host specific ectoparasites and spend their entire life on the host. Phthiriasis palpebrarum may be clinically misdiagnosed as seborrheic blepharitis and allergic conjunctivitis.²

CASE REPORT

A 60-year-old female presented to our outpatient department with complaints of itching in the eyelids and in the scalp margins for the last one month. She gave history of gritty feeling over eyelids on and off. She did not have any comorbidities like hypertension or diabetes mellitus.

On examination mild scaling was present in both upper eyelid margins and in the scalp. On further continuous illumination and observation for 2 to 3 minutes some movements were noticed in eyelashes. On video dermatoscopic examination, multiple crab lice were found moving in eyelashes and multiple oval nits were seen attached to eyelashes (Figure 1). After application of liquid paraffin, few eyelashes were epilated and examined under light microscope. A squat bodied six-legged louse was seen with second and third pair of legs clinging to hair with heavy pincer like claws (Figure 2). Other hairy areas of the body showed no evidence of infestation. Routine ophthalmology opinion was obtained. She was treated with tablet ivermectin 12mg twice 10 days apart and trimming of eyelashes was done by ophthalmologist. She improved very well following therapy.



Figure 1: Crab louse seen clinging on to the eyelashes on dermatoscopic examination.



Figure 2: Louse identified in potassium hydroxide mount in light microscopy.

DISCUSSION

Phthiriasis palpebrarum is a rare cause of blepharitis due to louse *phthirus pubis*.³ It belongs to order Anoplura, family Pthiridae and genus *Phthirus*.⁴ Its body is squat with three pairs of legs, with the second and third pairs carrying heavy pincer like claw.⁵ It is adapted to live in hair of particular density. It colonises pubic area, eyebrows, eyelashes, margin of scalp hair, axillary hair, beard hair, hair on trunk and limbs. The adult louse has a life span of one month during which female lays 7 to 10 eggs per day. The eggs hatch in about 8 days and nymph requires another 8 days to attain maturity. The site of infestation can give a clue to the mode of transmission.³ It probably reaches the eye by transmission from the pubic

area through hands. It is transmitted also via sexual contact or via clothing and towels. A case of phthiriasis palpebrarum, where-in louse was found buried under the lid margin, has been reported.⁶ The most common symptom is itching due to dermal hypersensitivity to louse's saliva.

The simplest method of treatment involves manual removal of lice and nits with forceps. Petrolatum applied to lid margin twice daily for eight days, physostigmine, 4% pilocarpine, cryotherapy, argon laser ablation, yellow mercuric oxide, 1% Gamma Benzene Hexachloride application, aqueous malathion shampoo are other forms of treatment. Clothing and bed linen must be washed and heat dried after treatment.^{3,4,6}

CONCLUSION

Phthiriasis palpebrarum is a rare and often misdiagnosed condition as it closely resembles seborrheic blepharitis. But it is a completely treatable condition. Therefore, close examination under optimal illumination is necessary for correct diagnosis and prompt treatment.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

1. Khan T. Phthiriasis palpebrarum presenting as anterior blepharitis. *Ind J Public Health.* 2018;62(3):239.
2. Papageorgiou E, Kalampalikis S, Koltsidopoulos P, Tsironi E. Phthiriasis palpebrarum in three young siblings. *Oxford Med Case Reports.* 2018;2018(11):093.
3. Ashraf M, Waris A, Kumar A, Akhtar N. Case Report: A case of unilateral phthiriasis palpebrarum infestation involving the left eye. *BMJ Case Reports.* 2014; 2014.
4. Rundle PA, Hughes DS. *Phthirus pubis* infestation of the eyelids. *Brit J Ophthalmol.* 1993;77(12):815.
5. Griffiths C, Barker J, Bleiker T, Chalmers R, Creamer D. *Rook's textbook of dermatology.* 9th ed. Chichester, West Sussex: John Wiley & Sons Inc.; 2016.
6. Jiang J, Shen T, Hong CY. A peculiar case of eye pruritus: phthiriasis palpebrarum initially misdiagnosed as common blepharitis. *Inter J Ophthalmol.* 2011;4(6):676.

Cite this article as: Sivasubramanian MB, Ramakrishnan R, Narasimhan M. Phthiriasis palpebrarum: a diagnosis of keen observation and suspicion. *Int J Res Dermatol* 2020;6:267-8.