



# The Presence of the Pubic Louse *Pthirus Pubis* in Two Patients Complaining from Tick Infestation

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## ABSTRACT

*Lice of the family pediculidae are obligatory parasites, which are accompanying the human kind during its entire evolution. We present the case of two patients, who visited our hospital with multiple bites. The physical examination of the patients did not reveal any ticks however, the more in depth inspection of the pubic area, where the pruritus was intense, revealed the presence of 1-1.5 mm long insects, which were diagnosed by the parasitologists as belonging to the pubic louse *P. pubis*. The patients and their families were treated with 5% permethrin and were free of lice and symptoms within two weeks.*

**Key words:** *Pubic lice, human, Malatya*

## Kasık Biti Şikâyeti Olan İki Hastadaki Kene İnfestasyonu

*Bitler zorunlu parazit olup tüm evrim dönemlerini konak üzerinde geçirirler. İki olgu kasık bitinin halk arasında tam olarak tanınmaması nedeniyle korunma yolları konusunda eksik bilgilerin olduğuna dikkat çekmek amacıyla sunulmuştur. Olguların her ikisi de kene enfestasyonunun yaygın olduğu yaz aylarında, kene ısırığı ve vücutta çok sayıda kene bulunduğu şikâyetiyle devlet hastanesine başvurdu. Hastaların yapılan muayenesinde kene enfestasyonuna rastlanılmadı fakat kaşıntı ve ağrıların olduğu lezyonlu bölgelerde 1-1.5mm boyutunda hareketli canlılar tespit edildi ve 5-6 tane çıkartılıp cam tüplere konularak parazitoloji laboratuvarına gönderildi. Parazitolojik incelemede kasık biti tanısı konulması üzerine hastalara konu ile ilgili sağlık eğitimi verildi ve hastalar aileleri ile birlikte iki hafta süren %5'lik permetrin tedavisi sonrası kontrole çağrıldı.*

**Anahtar kelimeler:** *Kasık biti, insan, Malatya*

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## INTRODUCTION

The lice are wingless insects in the anoplura group. *Pediculus capitis*, *P. corporis* and *P. pubis* of three species of humans pathogens. Morphologically *P. capitis* and *P. corporis* identical. *Pediculus pubis* shows some differences. The body of pediculus is flattened in three parts as abdomen, thorax and head. Their legs end with hook-shaped claws (1). Middle and back legs of the *P. corporis* are more developed regarding to front legs and having very strong claws. The genital organs of pediculus are located in the last two segments of the organism and oval shape in *P. capitis* and *P. corporis*; and having corners in *P. pubis*. In addition, the width of the chest and abdomen are almost equal within the species (2). *Pediculus capitis* and *P. corporis* can infect the people regardless of age and socio-economic conditions. It can cause epidemics, as well. As it spreads with sexual contact, *P. pubis* infects particularly sexually-active adults between 15-45 years old. Furthermore, *P. pubis* may be transmitted among people with closet toilets dresses and beds (3,4). Infestation develops following the transfer of nymph and adult forms of the parasite to new host. Symptoms appear within 5-6 hours of infestation onset. Lice feed with blood-suction and cause erythema, swelling and severe itching where the parasite involves. Permethrin in 5% and 1% is used for body and hair infestation, respectively. Also the clothes, underwear, bed linen should be boiled and be ironed to eliminate the eggs of the parasite (5,6). In this paper, two cases of pubic lice is presented to attention the diagnosis and preventive measures of the parasite.

## CASE

Forty-eight and 31 years old male patients admitted to emergency clinic of Beydagi State Hospital in August and September 2009, respectively. Both patients concerned with ticks regarding the Crimean-Congo Hemorrhagic Fever (CCHF). Because of the perineal localization of the insects, the emergency physicians requested Urology consultation. Tick on suspicion of virus infection (CCHF) in blood samples taken for complete blood count, PT and INR values and ALT, AST, GGT, IDH and biochemical parameters were measured as CK. No significant feature was recorded from the patients' history, except pubic itching. In the first examination, there were many motile, yellowish insects in 1-1.5 mm size observed and no tick was found. Five to six of them were placed in to glass tubes for parasitological inves-

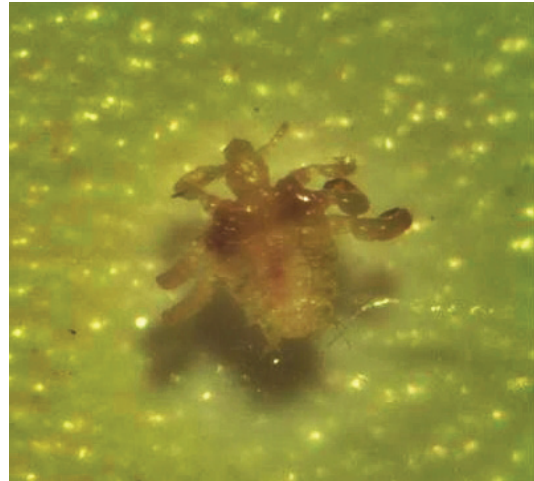


Figure 1. *P. pubis* (adult) (Stereo microscopy)

tigation. Macroscopic and low size microscopic observations yielded pubic lice (Figure 1). The patients were re-evaluated. Many lice were further found in the arm, leg, shoulder and abdominal areas of the both patients. No parasite as found in eyelash. The patients were educated about the parasite and its treatment and prevention activities. Permethrin 5% solution was prescribed for two weeks therapy. In the control examination, the patients were observed as completely treated from lice. Dermatology clinic of the university hospital also confirmed these cases.

## DISCUSSION

As a result of blood suction by the parasite, itching is the major symptoms of pediculosis and phitriosis. The reservoir of the lice is infested human. Although lice are more common in low socio-economic populations, it can be found in several human groups. There are several epidemiologic studies about *P. capitis* and *P. corporis* (7,8). However, there is less data related the *P. pubis*'s epidemiology. Resource information can be accessed in the form of case studies have been done in (9-12). Ozcan et al reported 19.1% *P. pubis* frequency rate in the patient of Elazig Mental and Nervous Diseases Hospital (3). In this report both patients applied to state hospital with tick suspicion, because the season was summer. The patients were persuaded about the lice. They stated that they knew the hair lice but not pubic lice. Both patients included their family members

were informed and treated. Our observation from these cases have suggested that majority of our population do not know adequate information about pubic pediculosis. Additionally some people may disidentify pubic lice as tick. Society should be educated according to this ectoparasite. In addition, regional studies are planned to determine the epidemiology of parasites.

#### REFERENCES

1. Mathieu ME, Wilson BB. Lice (Pediculosis). In: Mandell GL, Bennett JE, Dolin R, eds. *Mandell: Principle and Practice of Infectious Disease*. Churchill Livingstone, 5th. CD-Rom; 2000.
2. Saygı G. *Basic Medical Parasitology*. Esnaf Ofset Printing; 1998.
3. Ozcan K. Louses and Parasitological Importance. In: Ozcal MA, Daldal N. eds. *The Artropod Disease and Vectors*. Turkish Society for Parasitology Publication. Izmir: 1997.
4. Burgess IF. Human lice and their management. *ADV Parasitol* 1995;36:271-342.
5. Chosidow O. Scabies and Pediculosis. *Lancet* 2000;355:819-26.
6. Leone PA. Scabies and Pediculosis Pubis: An Update of Treatment Regimens and General Review. *Clin Infec Dis* 2007;44:153-9
7. Akisü Ç, Sarı B, Aksoy Ü, Özkoç S, Öztürk S. Investigation of the prevalence of pediculus capitis in a primary school in Narlıdere and comparison of this result with the study in the same school carried out previously. *Acta Parasitologica Turcica*. 2003;27:45-48
8. Kopturk A, Baz K, Bugdayci R, Sasmaz T, Tursen U, Kaya TI, Ikizoglu G. The prevalence of pediculosis capitis in schoolchildren in Mersin, Turkey. *Int J Dermatol* 2003;42: 694-8.
9. Goldman L. Phthirus Pubis Infestation Of The Scalp And Cıha In Young Children. *Arch Derm Syphilol* 1948;57:274.
10. Alexander J. O'D. Phthirus pubis Infestation of the Eyelashes *JAMA* 1983;250:32.
11. Sarma CN. Pediculosis of the eye lashes. *Indian J Ophthalmol* 1970;18:190-2.
12. Ikeda N, Nomoto H, Hayasaka S , Nagaki Y. Phthirus pubis Infestation of the Eyelashes and Scalp Hairs in a Girl. *Ped Dermatol* 2003;20:356-357.