

Quiz

Generalized pruritus in an adult male

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Report of a case

A 35-year-old married male presented with three-week history of generalized pruritus with nocturnal severity. However, no other family member had pruritus. He had history of hey fever about 10 years ago. About a month ago he was given some parenteral antibiotic for some urinary tract infection. Rest of the system review was unremarkable. He had been treated with antihistamines and topical steroids and antipruritics by his family physician but of no use.

Physical examination revealed excoriations over the trunk. However, interdigital webs, axillae and genitals were unaffected. Close examination of abdominal skin showed some specks attached to body hair (**Figure 1** and **2**).

What is your diagnosis?



Figure 1



Figure 2

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Diagnosis

Phthiriasis (pediculosis pubis)

Examination of pubic hair also revealed presence of lice and nits. Patient was advised topical 5% permethrin cream and shaving of pubic hair.

Discussion

Phthirus pubis (crab louse) is a wingless, hematophagous insect of class *Insecta* and about 0.8-1.2 mm long.^{1,2} Its hind pairs of legs are stouter and clawed which help it to grasp widely spaced pubic hair. The louse attaches to pubic hair and the adjacent hair of the chest, abdomen, buttocks and legs. In 60% of cases other sites are affected in addition or exclusive to pubic area. Scalp and eyelashes (phthiriasis palpebrarum) may be infested occasionally in children. The number of adult lice in an infested person is 10 to 25 or more in immunosuppressed host. During a life span of 2 weeks a female lays about 25 eggs. Nymphs mature into adults over 2 weeks.

Phthiriasis is commonly acquired as a sexually transmitted disease (STD). The disease affects both sexes without any racial predilection. In a study homosexual males were predominantly affected.³ Human DNA can be extracted from lice, so lice can be used as forensic evidence in cases of sexual assault.² Transmission is more common during winter months. About 30% of patients have another concomitant STD; hence screening for HIV, syphilis, gonorrhoea, chlamydial infection, herpes, warts and trichomoniasis is warranted. It is advisable that children with phthiriasis should be searched for sexual abuse.

Clinically, pruritus is the usual symptom which may be generalized and nocturnal in intensity. Itching develops due to hypersensitivity to louse bite which otherwise is painless. Excoriations may be seen which may secondarily get infected. Sometimes, lice and nits can be noticed by the patient. Maculae cerulae are also characteristic. These bluish-grey macules, seen on the lower abdomen and thighs, are thought secondary to louse bite. The colour of macules results from the deep dermal hemosiderin deposits. Erythema annulare centrifugum can be induced by phthiriasis.⁴

Diagnosis of phthiriasis can be established by demonstrating lice and nits on body hair. Nits on pubic hair may mimic white piedra or trichomycosis pubis.² However, KOH smears will be helpful in these cases. Similarly, extensive excoriations may be mistaken for scabies or contact dermatitis which needs to be excluded by vigilant clinical examination. Phthiriasis palpebrarum may resemble allergic blepharconjunctivitis.

Pubic lice are generally susceptible to agents used for head lice such as permethrin (1%, 5%), lindane (1%), malathion (0.1%) etc.^{2,5} Preparation is applied undiluted to infested and adjacent areas thoroughly for 10 minutes. The area is then washed. A fine-toothed comb facilitates the removal of dead lice and eggs. A second application may be advised 7-10 days later.¹ Patients may be instructed to launder their clothing and bedding and avoid sexual contact until their infestation is cured. Sexual contacts should be treated simultaneously; however, uninfested house members need not to be treated.

Patients with HIV/AIDS tend to have more severe infestation and may be refractory to conventional treatment.

For eyelashes infestation, petroleum jelly, fluorescein dye strips and yellow oxide of mercury ointment are used. Manual extraction of lice and nits and cutting of affected lashes at base can be tried. Ivermectin may be a potential oral therapy.

References

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