

A REPORT ON THE RARE OCCURRENCE OF *PHTHIRUS PUBIS*, THE HUMAN PUBIC LOUSE OR CRAB LOUSE IN A TWO YEAR OLD MALE GERMAN SHEPHERD DOG

A. SANGARAN & S. T. BINO SUNDAR

Department of Veterinary Parasitology, Madras Veterinary College, Tamilnadu
Veterinary and Animal Sciences University, Chennai, Tamil Nadu, India

ABSTRACT

The occurrence of the human pubic louse or crab louse *Phthirus pubis* was reported in a two year old male German shepherd dog with intense itching, frequent biting around the back and loss of hairs surrounding the anal region. On examination of the skin scrapings, there was no evidence of fungal conidiospores or mites. However, on closer examination of the hairs with the help of a magnifying lens revealed nits and lice which were identified as *Phthirus pubis*. The infested dog was successfully treated with topical application of deltamethrin and mycoderm powder.

KEYWORDS: Phthirus Pubis, Human Louse, Occurrence, Dog

INTRODUCTION

The pubic, or crab louse, *Phthirus pubis*, is usually found on the hairs around the genital region of human beings and can also occur on other areas of the body. The lice belong to the genus *Phthirus* possess powerful legs and usually gets attached to the hairs, on which the eggs are laid. Lice are generally considered to be host specific. Though, *Phthirus pubis* is specific to human beings there is paucity of information of this lice occurring in unnatural host such as dogs. The present paper deals with the report on the occurrence of *Phthirus pubis* in a German shepherd dog, which is normally considered to be an unnatural host for this louse.

Phthirus pubis is provided with large tarsal claws which are adapted to cling to the coarse hairs of the pubic and perianal region and the infestation is more common in human beings with unhygienic practices. Infestation with lice is generally referred as pediculosis. Some people are sensitive to the bite and in persons who had lice for long periods, the skin may become thickened and show spots of hyperpigmentation. These skin changes have been referred to as vagabond's disease.

CASE REPORT

In the present study, a German shepherd dog, male, two years old has been reported to have intense itching at the back, frequent biting around the back and anal area with loss of hairs. The dog looked apparently healthy with deworming being given regularly. However, on examination of the skin scrapings, there was no evidence of fungal infection or mite infestation.

COLLECTION OF SAMPLE FOR CONFIRMATION

The hair of the dog around the affected area particularly, the back and anal region was collected and examined. On closer examination of the hairs with the help of a magnifying lens revealed nits (eggs of lice), suggesting a possible lice infestation. Further examination of the dog showed the presence of lice in the coarse hair, surrounding the anal region and at the back. The lice were collected from the infested area by forceful pulling of the hairs along with the base of the hair and brought to the laboratory for further identification.

IDENTIFICATION OF THE LICE

The collected lice were processed by rinsing in water followed by dehydration in ascending grades of alcohol (70 %, 90 % and absolute alcohol), cleared in lacto phenol and mounted on to a microscopic slide with DPX mountant solution. The lice was examined under a dissection microscope and was identified as *Phthirus pubis*, the crab louse of human beings, which is a rare occurrence in dogs and probably the first report on the infestation of a dog with human louse in this region of India. The lice was confirmed as *Phthirus pubis* based on morphological features such as shape of the body (round) with the posterior pair of legs thicker than the anterior pair of legs and possess large claws (Soulsby, 1982).

TREATMENT

Initially, the dog was treated symptomatically with phenaramine maleate 25mg tablets for three days along with topical application of mycoderm powder for the pruritus to subside. However, the dog continued to have itching one week later. On confirmation of the louse as *Phthirus pubis*, the dog owner was advised topical application of deltamethrin (Butox) in the form a bathing solution as per the manufacturer's instruction, thrice a week for 2 – 3 weeks. Further, it was advised to repeat the deltamethrin treatment if itching persists for next 2 weeks along with topical application of mycoderm powder to soothen the infested area. In case of continuous itching and uneasiness by the dog with the above treatment, the dog owner was advised to apply permethrin cream (1%) on the infested parts of the body of the dog. The second and third application was repeated on 10th day and after 14 days respectively. After the treatment the dog was found to be free from itching and was active with disappearance of lice.

DISCUSSION

Only limited reports are available on the occurrence of *Phthirus pubis* in dogs worldwide. *Phthirus pubis* is usually transmitted among human beings by sexual contact or by use of towels, clothing and bedding used by an infested person. Dong-Lai Ma and Vano-Galvan (2010) reported on the infestation of the eyelashes of a woman with *Phthirus pubis*. In children, eyelashes are the most common site of infestation (Burgess, 1995). Children are usually infected through direct passage of the lice from their parents or other infected contacts (Ikeda *et al* 2003). *Phthirus pubis* prefers most parts of the body covered by hairs and it is very rare to see them in hairless parts (Burkhart, 1999). The possibility of the lice in this case could be due to the sharing of the bedding or towel that is being used by an infested person handling the dog.

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