

PRACTICAL DERMOSCOPY

Pthirus pubis Under a Digital Dermoscope: Anatomic Description[☆]



Comment

Descripción anatómica del *Pthirus pubis* mediante dermatoscopia digital

Case Report

A 42-year-old man presented with increasingly severe pruritus mainly affecting the pubic region. He attributed its onset to sporadic sexual intercourse with a man. Physical examination showed expected findings, and in addition, the patient brought in a small pot containing about a dozen of the culprit arthropods, which were still moving.

What Is Your Diagnosis?

One of the insects was placed on a gauze and viewed under a digital dermoscope at a magnification of $\times 50$ (Fig. 1).

Dermoscopy showed a sucking louse (Anoplura) with features consistent with *Pthirus pubis* (crab louse). The crab louse is round, can measure up to 2 mm in length and has a clearly distinct anatomy to that of the head or body louse (*Pediculus humanus capitis* or *corporis*).

Pubic lice have been reported to be more common among gay, bisexual, and other people with a penis.¹ Their presence has been identified as a predictor of chlamydia in adolescents.²

The anatomy of *Pthirus pubis* can be characterized using different methods. Although these parasites have traditionally been examined by optical or electron microscopy,³ dermoscopy (which is of clear diagnostic value⁴) can also be used, both in vivo and ex vivo.⁵ Digital dermoscopes are ideal for studying the anatomy of public lice as they reduce the physical proximity needed for examination.

We present high-resolution dermoscopic images of *Pthirus pubis* that clearly show many of the anatomic structures of a female specimen of this ectoparasite, which has an admirable ability to adapt to hostile environments.³

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Figure 1 *Pthirus pubis*. Anatomic structure. Left, dorsal view. M: mouth. Formed by teeth (which cut into the epidermis like a circular saw) and a haustellum to suck the blood from the dermal vessels. The haustellum, in turn, contains 2 dorsal stylets (firmly positioned to form a conduit that empties into the pharynx), a medial stylet (containing a salivary canal), and a ventral stylet (that groups together the other stylets to form a fascicle). It also has distal teeth, which help penetrate the dermis. E: eye. 1: first leg (less robust than the other legs; fine terminal claw). D: digestive tube (seen against the light). Note the ingested blood. 2 and 3: second and third legs (more robust than the first leg; terminal claw similar to that seen in crabs, designed to grasp tightly to the hair of the host). Parts of the leg (c: coxa, tr: trochanter, f: femur, tb: tibia, tp: tibial projection; n: nail). D: dorsum showing some hair structures on the surface. *: spiracle. *Pthirus pubis* usually has 2 pairs of thoracic spiracles and 6 pairs of abdominal spiracles that connect the respiratory system to the outside. T: tracheal system. S: marginal septae. G: genital plate. gp: gonopod. Both the genital plate and the 2 gonopods are found in female specimens. Right image: ventral view. A: antenna (divided into 5 segments). Used to detect smell and moisture. St: sternite (segments constituting the ventral side).

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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