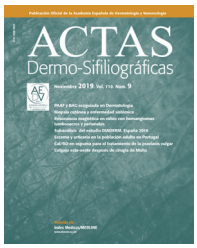
ACTAS
Dermo-Sifiliográficas

Full English text available at
www.actasdermo.org



PRACTICAL DERMOSCOPY

Pthirus pubis Under a Digital Dermoscope: Anatomic Description☆

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 ×50 (Fig. 1).

Comment

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 value[4]) 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]

☆ Please cite this article as: Martin-Gorgojo A, Comunión-Artieda A, Bru-Gorraiz F-J. Descripción anatómica del *Pthirus pubis* mediante dermatoscopia digital. Actas Dermosifiliogr. 2021;112:905–906.

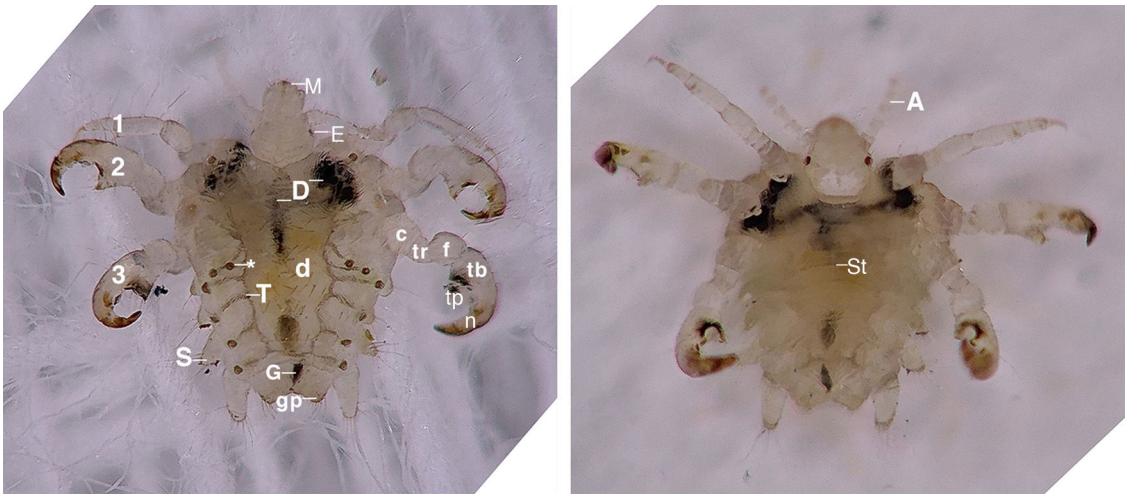


Figure 1 *Pthirus pubis*. Anatomic structure. Left, dorsal view. M: mouth. Formed by teeth (which cut into the epidermis like a circular saw) and a haustellum to suck the blood from the dermal vessels. The haustellum, in turn, contains 2 dorsal stylets (firmly positioned to form a conduit that empties 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. *Phthirus 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.

References

1. Varela JA, Otero L, Espinosa E, Sanchez C, Junquera ML, Vazquez F. Phthirus pubis in a sexually transmitted diseases unit: A study of 14 years. Sex Transm Dis. 2003;30:292–6.
2. Pierzchalski JL, Bretl DA, Matson SC. Phthirus pubis as a predictor for *Chlamydia* infections in adolescents. Sex Transm Dis. 2002;29:331–4.
3. Burns DA, Sims TA. A closer look at pthirus pubis. Br J Dermatol. 1988;118:497–503.
4. DeFazio JL, Spencer P. Images in clinical medicine. Dermoscopy of phthiriasis. N Engl J Med. 2010;362:e33.
5. Jimenez-Cauhe J, Fernandez-Nieto D, Ortega-Quijano D, Ramos-Rodriguez D. Characterization of phthirus pubis with ex vivo dermoscopy. Sex Transm Dis. 2020;47:280–1.

A. Martin-Gorgojo,* A. Comunión-Artieda, F.-J. Bru-Gorraiz

Ayuntamiento de Madrid, Sección de Especialidades Médicas, Servicio de ITS/Dermatología, Madrid, Spain

* Corresponding author.
E-mail address: alejandromartingorgojo@aedv.es (A. Martin-Gorgojo).