

# Characterization of *Phthirus pubis* With Ex Vivo Dermoscopy

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**P**ubic lice are smaller, less pigmented, and less mobile than head lice, and thus more difficult to observe with naked eye.<sup>1</sup> In addition, the increasing habit of pubic hair removal has led to a falling incidence of pubic lice owing to the destruction of its natural habitat.<sup>2</sup> This may be responsible for the atypical patterns of *Phthirus pubis* infestation in other parts of the body (eyebrows, axillae, trunk)<sup>2</sup> and may be an underestimated cause of resistant pruritus and dermatitis. In vivo dermoscopy is useful for identifying nits and lice on the skin in these cases.<sup>1,3</sup> However, a better characterization of the parasite can be made by collecting it from the skin surface with a transparent adhesive tape. This ex vivo dermoscopy is a simple and convenient method that allows for a more hygienic and detailed examination (Fig. 1), with no need of other devices, such as direct,<sup>3</sup> confocal,<sup>4</sup> or electron microscopy.<sup>5</sup> *P. pubis* has a short and broad body with 6 legs. The first pair of legs is slim; the second and third pairs are thicker and carry brown claws for grasping hair. The anterior portion has small mouthparts, used for probing the skin and withdrawing blood from dermal vessels. The ingested blood flows through the digestive tract, identified as brown-reddish structures in both sides and middle of the body (Video, Supplemental Digital Content 1, <http://links.lww.com/OLQ/A453>). External openings of the respiratory system, called spiracles, are seen as several brown dots at the periphery of the body. Air enters through them and is delivered to the organs by air tubes, depicted as a network of brown longitudinal and transverse lines.<sup>4,5</sup>

First-line treatment is topical 1% permethrin. Other pediculicide drugs include 0.2% phenothrin, 0.5% malathion, 1% lindane, and topical or oral ivermectin.<sup>6</sup>

In conclusion, ex vivo handheld dermoscopy is a useful technique for a quick bedside diagnosis of pediculosis and species identification.



**Figure 1.** Dermoscopic characterization of *P. pubis* (DermLite DL4W, contact, polarized light). Broad and triangular body with 2 anterior slim legs, and 4 posterior thick legs with dark brown claws (C). D indicates digestive system, brown-reddish colored due to ingested blood; M, mouthparts with antennae; S, spiracles, corresponding to the external openings of the respiratory system, which is conformed by arranged and branching air tubes (T).



**Video.** Ex vivo dermoscopy showing an alive *P. pubis* removed from the skin (Supplemental Digital Content 1, <http://links.lww.com/OLQ/A453>). Note the peristaltic movements pumping the ingested blood through the digestive system (DermLite DL4W, contact, polarized light).

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