Entodermoscopy: dermoscopy for the diagnosis of pediculosis

Entodermoscopia: dermatoscopia de epiluminescência para diagnose da pediculose

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Abstract: We report a clinical case in which contactless dermoscopy was used as an aid to the diagnosis of pediculosis and clinical evaluation of the effectiveness of treatment of this condition.
Keywords: Dermoscopy; Lice infestations; Pruritus

Resumo: Relata-se um caso clínico no qual a dermatoscopia de epiluminescência sem contato foi empregada como método auxiliar para o diagnóstico e a avaliação clínica da eficácia do tratamento da pediculose do couro cabeludo.

A six-year-old infant was brought by his parents to our clinic, where he was seen for pruritus of the scalp of one month's duration. Physical examination with the aid of contactless dermoscopy (DE) revealed the presence of an empty nit case attached to a hair, which was removed so that it could be examined more closely (Figure 1A). The parents were informed of the diagnosis and given advice on the appropriate treatment, namely, treatment with deltamethrin shampoo in two three-day treatment cycles separated by a one-week interval and manual removal of the nits.

After one month the child returned to the clinic and presented with persistent pruritus of the scalp. Physical examination failed to reveal the presence of nits. However, using DE we were able to observe live lice (*Pediculus humanus var. capitis*) in the hair (Figures 1B and 1C); more detailed pictures of the lice on a white surface are shown in Figures 1D and 1E.

Although dermoscopy was initially developed for the diagnosis of pigmented lesions, [1] it has been used as an aid to diagnosis in squamous diseases, depigmenting diseases, pseudofolliculitis barbae, infections and infestations. [1] Dermoscopic patterns have already been described for viral warts, molluscum contagiosum and tinea nigra among other conditions. [1] The term "entodermoscopy" was coined to

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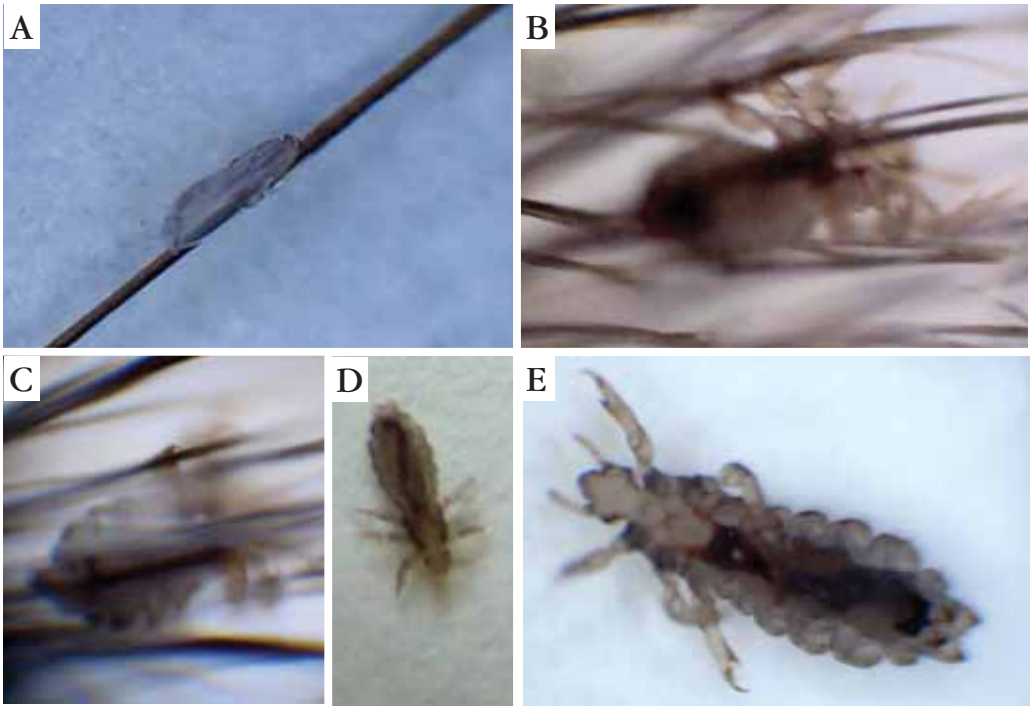

Figure 1: A. Empty nit affixed to a strand of hair, seen at non-contact dermatoscopy. **B.** Observation of Pediculus humanus capitis on the patient's hair. **C.** Detail using the zoom function of the Sony DS9 digital camera, showing the parasite affixed to strands of hair. **D.** Parasite removed with tweezers and placed on a smooth surface. **E.** Detail of Pediculus humanus capitis, with the brownish-burgundy color indicating the digestive tract filled with the patient's blood.

refer to the use of DE as an aid in the diagnosis and follow-up of treatment of infestations such as scabies, pediculosis, tungiasis, cutaneous larva migrans and tick infestations, as well as reactions to the spicules of spiders. [1,2]

Head lice infestation can very often be detected with the 4 eye, and examination with a magnifying glass is usually sufficient. However, as in our patient, the number of lice and/or nits may make detection by traditional methods difficult. This problem can be overcome by using DE. ❑

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