Dermoscopy features for the diagnosis of furuncular myiasis

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Abstract: We describe a 56-year-old Brazilian woman presenting three nodular lesions on the scalp. Dermoscopy of all lesions showed a creamy-white body with central bird’s feet-like structures surrounded by a thorn crown, corresponding to the posterior segment of the Dermatobia hominis larvae. These novel dermoscopic features allowed us to easily diagnose furuncular myiasis.

Keywords: Dermoscopy; Diagnosis; Myiasis; Parasitic diseases

Resumo: Descrevemos o caso de uma paciente brasileira de 56 anos de idade do sexo feminino que apresentou três lesões nodulares no couro cabeludo. A dermatoscopia das lesões mostrou um corpo branco-amarelado com uma estrutura central similar a pés de pássaro, circundado por uma coroa de espinhos, correspondendo ao segmento posterior das larvas de Dermatobia hominis. Estas novas características dermatoscópicas nos permitiram diagnosticar facilmente miíase furuncular.

Palavras-chave: Dermoscopia; Diagnóstico; Doenças parasitárias; Miíase

BACKGROUND

Dermoscopy has proved to be very useful in several dermatologic conditions. The term endodermoscopy was used to describe the use of dermoscopy for the diagnosis of skin infections and infestations. This is a new and interesting application of this technique, which might be useful to dermatologists in areas where these conditions are common, such as in tropical countries.

Myiasis is the infestation of the skin by the larval stage of different botflies, mainly Dermatobia hominis. Furuncular myiasis is common in Mexico, Central and South America. In developed countries, it is only occasionally seen as a travel-associated dermatosis. Even in Brazil, where this is a very common dermatosis, many physicians may not be aware of this condition, which is commonly misdiagnosed as boils and treated with antibiotics.

We describe a case of a furuncular myiasis with its associated dermoscopic features.

OBSERVATIONS

We present a 56-year-old Brazilian woman complaining of 3 nodular lesions on the scalp, which had appeared 6 weeks before. She presented with 3 non-healing, painful boil-like lesions, draining a serosanguineous fluid from the central pore (Figure 1). The lesions were accompanied by a stinging and movement sensation inside the nodule. She had recently returned from a trip to a rural area.

Dermoscopy showed the posterior segment of the larva with its breathing spiracles looking like bird’s feet. Those structures were seen in the center of a creamy-white body that was surrounded by black dots shaped as a thorn crown and representing small spines in a circular row (Figure 2). The larva fed in a subdermal cavity for 5-10 weeks, breathing through a pore in the host’s skin, as demonstrated in the video.

The diagnosis of furuncular myiasis was established and the patient underwent a surgical procedure to extract the larva.
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caused by *D. hominis*. In Africa, myiasis is mostly due to the larvae of the flies *Cordylobia anthropophaga* and *C. rhodaini*, whereas in the northern hemisphere (North America, Europe, Africa, Asia), it can be caused by the larvae of *Hypoderma spp*. The dermoscopic patterns of these agents have not yet been described.

CONCLUSION

Dermoscopy has proved itself a useful tool for the diagnosis of furuncular myiasis. We presented new features in the field of entodermoscopy, namely bird’s feet and thorn crown like structures corresponding, respectively, to the posterior spiracles used by the larva for breathing and the small spines surrounding them.

ACKNOWLEDGEMENTS

We are very thankful to Guilhermo Loda and Vitor Azulay for the surgery.
REFERENCES


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