

Non-traditional Indications in dermoscopy

Indicações não tradicionais da dermatoscopia

ABSTRACT

Dermoscopy is a proven technique in the in vivo diagnosis of pigmented lesions. New uses in other dermatoses and in the control of clinical and surgical treatments are developing quickly. This article presents some examples of other such applications for dermoscopy.

Keywords: dermoscopy; tick infestations; neoplasms; virus diseases.

RESUMO

A dermatoscopia tem sido técnica de comprovada importância no diagnóstico in vivo de lesões pigmentadas, e a cada dia surgem novas utilizações em outras dermatoses e para controle de tratamentos clínico e cirúrgico. Este artigo apresenta alguns exemplos de outras indicações da dermatoscopia.

Palavras-chave: dermatoscopia; infestações por carrapato; neoplasias; dermatologia; víruses.

Dermoscopy improves the accuracy of diagnosing pigmented lesions by identifying specific criteria that are not visible to the naked eye, compared to standard examinations. Its use in other types of lesions has become increasingly popular, as evidenced by an ever-increasing number of descriptions in the international literature.¹ Among those non-traditional applications, the diagnosis of cutaneous infections and infestations and the monitoring of some benign neoplasias can be highlighted.

Diseases that are very common in specific geographic regions – such as scabies, pediculosis, pediculosis pubis, tungiasis, larva migrans, tinea nigra, viral warts, and molluscum contagiosum – are often difficult to diagnose, which leads to delays in treatment, increasing the possibility of contagion and health-care spending.² An example is infestation by *Amblyomma cajennense* (or *Cayenne tick*, also known as mites) larvae, which produces erythematopapulous eruptions with intense pruritus and can be immediately diagnosed through dermoscopic examination.³ The challenging treatment for the remission of plantar warts, as well as for tinea nigra fungal infections caused by cau-

Applied Dermatoscopia

Authors:

Carlos Augusto Silva Bastos¹

¹ Dermatologist Physician, Centro de Estudos de Dermatologia e Infectologia Souza Araújo (Cedisa), Setor de Ciências da Saúde da Universidade Federal do Paraná (UFPR) – Curitiba (PR), Brazil.

Correspondence:

Dr. Carlos Augusto Silva Bastos
Rua Frei Francisco Montalverne, 234/ casa
05 – Jardim das Américas
CEP 81540-410 – Curitiba (PR)
E-mail: carlosbastos12@gmail.com

Received on: 8 May 2012
Approved on: 12 June 2012

This study was carried out at the Centro de Estudos de Dermatologia e Infectologia Souza Araújo (Cedisa), Setor de Ciências da Saúde da Universidade Federal do Paraná (UFPR) – Curitiba (PR), Brazil.

Conflict of interest: None
Financial support: None

sed by *Exophiala werneckii* – which are very common in children – can also have their follow-up facilitated by polarized light dermoscopy monitoring.

The sebaceous nevus most often affects the scalp and face, appearing as a yellowish-pink plaque that can be fertile ground for the development of secondary benign and, less frequently, malignant neoplasias in appendages. The most common findings are trichoblastomas and papillary syringocystadenoma, with basal cell carcinoma developing in 1% of affected patients.⁴

CLINICAL OBSERVATIONS

Patient 1: A 70-year-old man presented with intensely pruritic erythematous papules on his whole body after visiting a rural area near Curitiba – PR, Brazil (Figure 1). The mite was identified by the dermoscopic examination as the causative agent, allowing immediate treatment and relief of symptoms.

Patient 2: A 55-year-old man developed painful plantar papuloverrucous lesions six months before seeking care. Once the plantar warts were diagnosed, a monthly cryotherapy treatment was initiated (Figure 2). Throughout the sessions it was possible to observe a progressive improvement in the lesions’ dermoscopic signs, which receded after six sessions.

Patient 3: A two-year-old girl presented an asymptomatic brownish spot on her right palm. Dermoscopy revealed signs compatible with *tinea nigra* (Figure 3), and topical antifungal-based treatment led to the regression of the lesions.

Patient 4: 20-year-old man presented with lesions on his scalp that began in childhood and had slightly increased in adolescence, with the onset of a papulous lesion near the central area (Figure 4). Dermoscopy revealed bluish-gray ovoid nests surrounded by a milky-white area, with thin and linear vascular structures, and an absence of arboriform vessels. After exeresis of the lesion, the histopathological examination confirmed the diagnostic suspicion of sebaceous nevus associated with trichoblastoma.

CONCLUSION

Dermoscopy is a noninvasive diagnostic technique that is becoming increasingly important as new applications are discovered. The early diagnosis of melanoma remains its most impor-

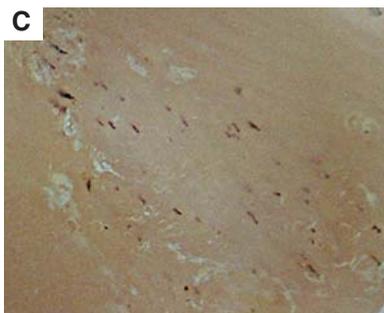


Figure 2. A: Plantar lesions after cryotherapy session **B and C:** dermoscopic examinations after two cryotherapy sessions, with the progressive reduction of the signs of thrombosed vessels

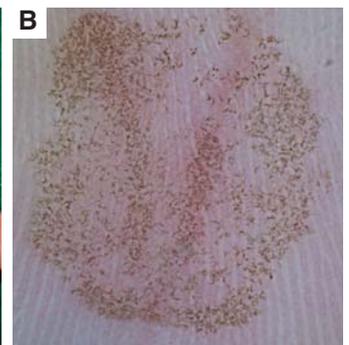
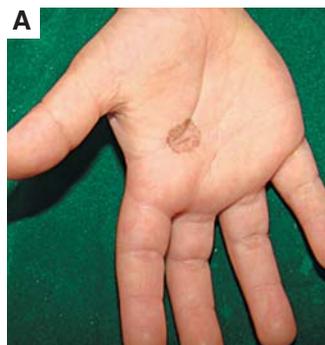


Figure 3. A: 1.5 cm brownish stain on the palm of a two year-old child **B:** dermoscopic examination showing interlaced/entangled thin light-brown lines, with reticulated aspect

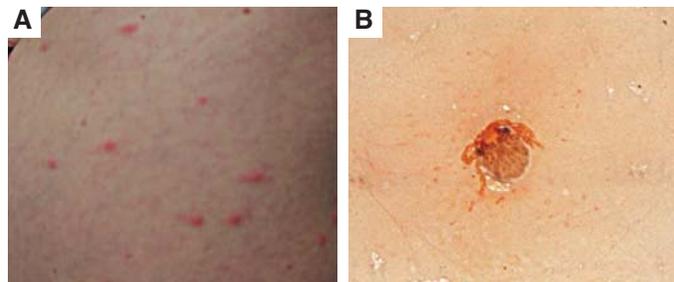


Figure 1. A: Multiple 4-5 mm isolated erythematous plaques on the abdomen **B:** Dermoscopic examination that revealed the presence of ticks in the larval stage (mite)

tant contribution, however its use in general dermatology has been disseminated through new case reports, making the dermoscope an indispensable tool for the dermatologist. ●

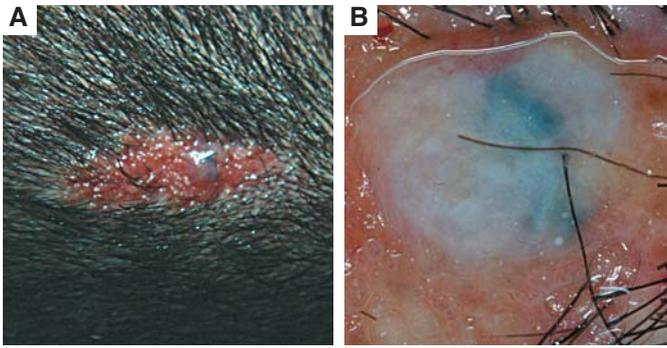


Figure 4. A: yellowish-pink, plaque shaped lesion of about 2.5cm x 1cm in the scalp, with bright bluish-white papule

B: dermoscopic examination of the papule, with bluish-gray ovoid nests surrounded by a milky-white area, with thin linear vascular structures, and absence of arboriform vessels

REFERENCES

1. Zalaudek I, Argenziano G, Di Stefani A, Ferrara G, Marghoob A, Hofmann-wallenhof R, et al. Dermoscopy in General Dermatology. *Dermatology* 2006; 212(1): 7-18.
2. Zalaudek I, Giacomel J, Cabo H, Di Stefani A, Ferrara G, Hofmann-wallenhof R, et al. Entodermoscopy: A new tool for diagnosing skin infections and infestations. *Dermatology* 2008; 216(1):14-23
3. Criado PR, Criado RFJ. Ixodiase revelada pela microscopia de epiluminescencia sem contato com a pele. *An Bras Dermatol.* 2010;85(3):389-90.
4. Giorgi V, Massi D, Trez E, Alfaioli B, Carli P. Multiple pigmented trichoblastomas and syringocystadenoma papilliferum in naevus sebaceus mimicking a malignant melanoma: a clinical dermoscopic-pathological case study. *Br J Dermatol.* 2003; 149(5): 1067-70.