

# A tricoscopia como Pista para o Diagnóstico

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**PALAVRAS-CHAVE** – Dermatite Esfoliativa; Síndrome de Netherton.

## Dermatology Quiz

### Trichoscopy as a Clue to the Diagnosis

**KEYWORDS** – Dermatitis, Exfoliative; Netherton Syndrome.

A 43-year-old man presented to our department with generalized erythroderma since early childhood, previously treated with topical and systemic corticosteroids with only partial improvement. The physical examination revealed polycyclic erythematous scaly plaques on the trunk and extremities and lichenification of the body folds (Fig. 1). In addition to skin lesions, we observed sparse hair of both eyebrows and eyelashes, however hair of the scalp was normal. The patient had a history of asthma in childhood. The family history was non-contributory and the patient didn't have any children. Analytically, routine blood tests were normal, however an elevated serum level of IgE 29650 UI/mL (N < 165) was detected.

We performed trichoscopy of the eyebrows that showed nodules along the hair shaft and distal fractures (Fig.s 2a and 2b). The trichoscopic examination of the hair of the scalp did not identify any changes.



**Figure 1** - *Ichthyosis linearis circumflexa*: Polycyclic erythematous scaly plaques on the trunk and upper extremities.

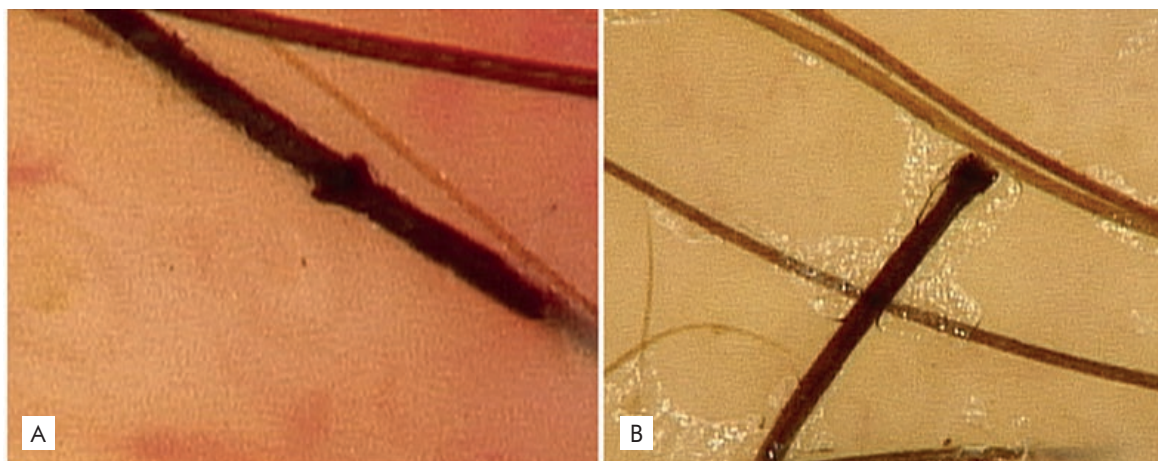
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## Qual o Seu Diagnóstico?



**Figure 2** - Trichoscopy: nodules along the hair shaft: "bamboo hair" (A) and hair fractures with distal nodules: "matchstick hair" (B).

### DIAGNÓSTICO:

#### COMÈL-NETHERTON SYNDROME

Comèl-Netherton syndrome (CNS) is an autosomal recessive genodermatosis, caused by mutation of the SPINK5 gene encoding the lympho-epithelial Kazal-type-related inhibitor (LEKTI). LEKTI is expressed in stratum corneum and its deficiency leads to premature desquamation and severe defect of skin barrier.<sup>1</sup> Clinical features include severe atopy and various allergic manifestations (including elevated IgE and hypereosinophilia), failure to thrive and congenital erythroderma progressing to *ichthyosis linearis circumflexa*.<sup>2,3</sup> Important differential diagnosis of CNS is severe atopic dermatitis, severe eczema, erythrodermic psoriasis and other non-bullous congenital ichthyoses.

Hair is usually sparse and the trichoscopy may show typical abnormalities of the hair shaft, namely *trichorrhexis invaginata*, that is considered pathognomonic.<sup>4</sup> This finding is caused by invagination of the distal part of the hair into the proximal, forming a nodule ("bamboo hair") or a cup-like ending of the hair ("matchstick hair") if fractured. Over the time, cutaneous and hair findings have tendency to improve so adult patients may present only with milder changes and thus pose a significant diagnostic challenge to the clinician.

The reported patient with previously unrecognized CNS presented with normal hair of the scalp and only a careful trichoscopic examination of the eyebrows revealed specific hair changes confirming the diagnosis of CNS. Similarly, Boussofara *et al* described a case of identical twins with CNS presenting with normal scalp hair and *trichorrhexis invaginata* was identified only on the eyebrows. This suggests that the preferred localization of trichoscopic examination

is the hair of the eyebrows.<sup>5,6</sup>

As presented, trichoscopy represents a simple tool to visualize TI and thus help establish the diagnosis. The identification of one hair with the typical invagination is sufficient to establish the diagnosis.<sup>6</sup>

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