

ACTAS Dermo-Sifiliográficas

Full English text available at www.elsevier.es/ad

CASE FOR DIAGNOSIS

Scarring alopecia in a black patient

Alopecia cicatricial en una paciente de raza negra

Clinical History

A 42-year-old black woman from Barbados, with no medical history of interest, consulted for progressive and permanent hair loss in the central region of the scalp; the hair loss had started 15 years earlier and there were no accompanying symptoms. The patient reported that she had used thermal and chemical hair straightening procedures on the scalp during adolescence.

Physical Examination

In the parieto-occipital region there was a rounded plaque of alopecia of cicatricial appearance, measuring 10×12 cm in diameter, with a negative hair pull test and with no visible inflammation (Figure 1).

Histopathology

Histology of both vertical (Figure 2) and horizontal (Figure 3) sections revealed fibrosis of the dermis, an absence of follicles, and a mild lymphocytic inflammatory infiltrate.



Figure 1



ACTAS Dermo_TSifiliográficas

(#)

Figure 2 Hematoxylin-eosin, ×2.5.



Figure 3 Hematoxylin-eosin, ×2.5.

What is your diagnosis?

0001-7310/\$ - see front matter $\ensuremath{\mathbb{G}}$ 2009 Elsevier España, S.L. and AEDV. All rights reserved.

Diagnosis

Central centrifugal cicatricial alopecia (CCCA).

Clinical Course and Treatment

Topical 5% minoxidil was prescribed on a twice daily regimen and slight repopulation was observed in the plaque of cicatricial alopecia after 2 months of treatment.

Comment

Currently the North American Hair Research Society considers the term CCCA to refer to a disease that predominantly affects African American women without including other causes of cicatricial alopecia. Previously this condition has been called hot-comb alopecia or follicular degeneration syndrome.

CCCA is considered to be the most common cause of cicatricial alopecia in black individuals.¹ It mainly affects adult women and, although the etiology is probably multifactorial, it has been possible to establish a relationship with a long history of physical or chemical damage to the scalp.^{2,3}

CCCA initially affects the area of the vertex and extends centrifugally; symptoms are nonspecific or may be absent.

The histology is often nonspecific; a characteristic premature desquamation of the inner root sheath may be observed in the early stages, although it is not exclusive to this disorder,⁴ associated with disintegration of the follicular epithelium and a predominantly lymphocytic inflammatory infiltrate. These changes progress to fibrosis of the dermis. Hair follicles are absent, as they are replaced by collagenous scar tissue.

Regarding the treatment of CCCA, there are no clinical trials that have demonstrated long-term efficacy.⁵ Topical and intralesional anti-inflammatory drugs, oral corticosteroids and immunosuppressants, tetracyclines, and minoxidil have been used; the possibility of hair transplant can be considered after 6 to 9 months of medical treatment.

We should keep CCCA in mind in the differential diagnosis of other cicatricial alopecias, such as lichen planopilaris, frontal fibrosing alopecia, and discoid lupus erythematosus, as well as traction alopecia and late stage female pattern alopecia, particularly in women of African American descent with a history of use of hairstraightening chemicals, hot irons, and traction, although cultural habits of scalp care do not necessarily predispose to this condition. Although CCCA is uncommon in Spain, we must be aware of this condition due to the changing immigration profile that affects us to an ever greater degree.

Conflicts of Interest

The authors declare no conflicts of interest.

References

- 1. Whiting DA, Olsen EA. Central centrifugal cicatricial alopecia. Dermatol Ther. 2008;21:268-78.
- Khumalo NP, Pillay K, Ngwanya RM. Acute "relaxer"-associated scarring alopecia: A report of five cases. Br J Dermatol. 2007; 156:1394-6.
- 3. Nnoruka EN. Hair loss: Is there a relationship with hair care practices in Nigeria? Int J Dermatol. 2005;44:13-7.
- Horenstein MG, Simon J. Investigation of the fair follicle inner root sheath in scarring and non-scarring alopecia. J Cutan Pathol. 2007;34:762-8.
- Callender VD, McMichael AJ, Cohen GF. Medical and surgical therapies for alopecias in black women. Dermatol Ther. 2004;17:164-76.

N. Hernández,* Y. Peñate, and L. Borrego

Servicio de Dermatología, Hospital Universitario Insular de Gran Canaria, Las Palmas de Gran Canaria, Spain

*Corresponding author.

E-mail address: noheh@hotmail.com (N. Hernández).