

Rare presentation of dissecting cellulitis in a 68-year-old Brazilian woman

Abstract

Dissecting cellulitis of the scalp (DCS) is a rare, chronic, disease characterized by inflammatory nodules, abscesses and sinuses that may progress to scarring alopecia. The coexistence of DCS with hidradenitis suppurativa, acne conglobata and pilonidal cyst is mentioned in literature as part of a 'follicular occlusion tetrad'. Classically affects adult afro-descendent men, although few cases in white men have been reported. This article illustrates a rare presentation of DCS in a 68-year-old woman from Brazil treated with oral isotretinoin.

Keywords: scarring alopecia, dissecting cellulitis, alopecia, dermoscopy

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Beatriz Wanderley Gayoso de Lima,¹ Priscila Kakizaki,¹ Neusa Yuriko Sakai Valente²

¹Dermatology Department, Hospital do Servidor Público Estadual, São Paulo, Brazil

²Dermatopathology Department, Hospital do Servidor Público Estadual, São Paulo, Brazil

Correspondence: Beatriz Wanderley Gayoso de Lima, Dermatology Department, Hospital do Servidor Público Estadual de São Paulo, Pedro de Toledo street, number 1800, zip code 04039-000, São Paulo, Brazil, Tel 55 (83) 999843009, Email beatrizgayoso7@yahoo.com.br

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Introduction

Dissecting cellulitis of the scalp (DCS), also known as perifolliculitis capitis abscedens et suffodiens, or Hoffmann disease, is a rare primary neutrophilic cicatricial alopecia of unknown aetiology that classically affects the vertex and occipital area of adult afro-descendent men. DCS has been considered to be part of the 'follicular occlusion tetrad' along with hidradenitis suppurativa, acne conglobata and pilonidal cyst, suggesting a common pathogenic mechanism: deep follicular occlusion, follicular rupture, then follicular infection.^{1,2} In the early literature, reported cases of DCS involved young African-descendent men, but recent case series from Taiwan, China and Spain indicated that cases were more widespread, although there are very few citations in the literature about DCS affecting females.³ Family history in DCS has been previously published in two brothers, suggesting a possible genetic factor.⁵ Therapeutic management of DCS is often challenging, but most authors considered isotretinoin as the initial treatment of choice.^{1,3,4}

Case report

A 68-year-old afro-descendent woman with a personal history of hidradenitis suppurativa, hypertension and moderate obesity presented to the outpatient clinic complaining about painful nodules on scalp with purulent discharge and hair loss for 2 years. Upon physical examination we found a plaque of alopecia with two fluctuant nodules located on occiput (Figure 1). Dermoscopy showed interfollicular erythema, pustules, black dots, vellus hair, and three-dimensional yellow dots (Figure 2). The diagnoses of DCS was made. The patient was successfully treated with isotretinoin 40 mg/day. Comparative pictures of clinical and dermoscopy findings were taken before and after 6 months of treatment.

At 6 months follow-up, the patient referred no more pain or purulent discharge. There was improvement in both scalp and axillary lesions. Dermoscopy showed less inflammation and vellus hair, however, we also saw white areas lacking follicular openings that represent tissue fibrosis (Figure 3).



Figure 1 Plaque of alopecia with two fluctuant nodules located on occiput.

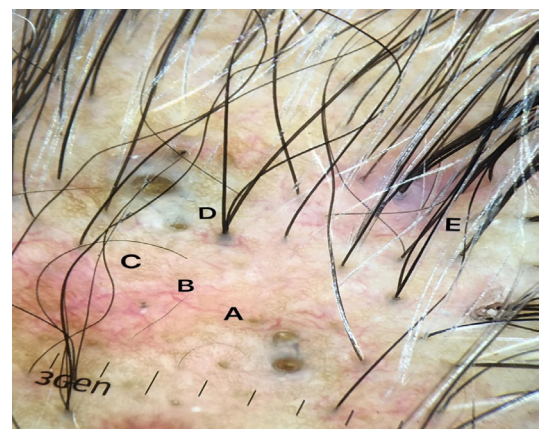


Figure 2 Initial dermoscopic findings. A. vellus hair, B. black dots, C. interfollicular erythema, D. three-dimensional yellow dots, E. cutaneous clefts with emerging hairs.



Figure 3 Dermoscopic findings at 6 months follow-up. White areas lacking follicular opening and vellus hair.

Discussion

DCS has always been described as a more common disease in African-American and dark phototypes male patients. However, in recent years, more and more series of cases of DCS affecting other ethnicities have been published, despite the fact that there are still few citations about DCS in women. Because of the male predominance of DCS, it was speculated that gender and sex hormones may play a pathogenic role, but further evidence for this idea is still lacking.³ Regardless of age and gender, our patient's clinical findings were consistent with data in literature. The pathogenesis of DCS remains poorly defined. Obstruction of the follicular ostium or infundibulum is regarded by some authors as the initiating event, as seen in the term "follicular occlusion tetrad" or "acne tetrad".² The first disease-based classification was suggested by Lee et al.³ They proposed a three-stage division based on clinicopathological findings, being stage I and II non-scarring, and stage III representing cicatricial alopecia, without contemplating their trichoscopic findings. Recently, a new proposal for classification with trichoscopy findings was suggested by Melo et al.,⁶ based on the fact that trichoscopy has proved to be increasingly important and useful in the diagnosis, prognostic assessment and monitoring of the treatment of scalp disorders.^{3,6} The trichoscopic classification divides the disease into three main stages: Early, abscedens and fibrotic stage. In earlier stages of the disease, the trichoscopic picture of DCS shows yellow dots, hair shaft formation, broken hairs and blackdots and exclamation mark hairs. Non-treated DCS progresses to the abscedens stage, which presents with three-dimensional yellow dots, dystrophic hairs, and yellow structureless areas. With the progression of the disease to the fibrotic stage, it is possible to identify trichoscopic features that are similar to the end phases of others scarring alopecias, like white areas lacking

follicular openings that represent tissue fibrosis and cutaneous clefts with emerging hair shafts organized into hair tufts with different sizes.⁶ There is no standard treatment for DCS, but monotherapy with oral isotretinoin (OI) at 0.5–1 mg/kg/day for three months to one year has been reported to yield the most favorable responses.^{1,3,4} The mechanism of action of OI in DCS is not yet fully established, but, as in acne, it appears to be related to its sebo suppressive effect, normalization of follicular keratinization, and an anti-inflammatory effect.⁷ Oral antibiotics, intralesional corticosteroids, dapsone, TNF- α inhibitors and surgical resection are also mentioned in literature, with variable responses.³

Conclusion

Our case illustrates the importance of being aware of this entity and providing early diagnosis in order to prevent the occurrence of scarring alopecia in women as well. It also highlights the role of hair and scalp dermoscopy in diagnosis, treatment choice, and follow-up.

Acknowledgments

None.

Conflicts of interest

The author declares there is no conflict of interest.

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