Photo Vignette

Patchy presentation of central centrifugal cicatricial alopecia

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Abstract

Central centrifugal cicatricial alopecia (CCCA) is a form of scarring alopecia typically characterized by progressive hair loss that begins at the crown or vertex of the scalp and expands circumferentially over time. Although most commonly described and diagnosed in women of African descent, CCCA can also occur in men. We describe the case of a 38-year-old man of African descent with a patchy presentation of CCCA. Unlike the classic distribution reported in the literature, this patient exhibited multifocal patchy areas of scarring hair loss. This case highlights the importance of considering CCCA in younger men presenting with atypical alopecia patterns to ensure accurate diagnosis and appropriate management.

Introduction

Central centrifugal cicatricial alopecia (CCCA) is a form of scarring alopecia predominantly described in women of African descent.[1] It is characterized by progressive hair loss that typically begins at the crown or vertex of the scalp and expands circumferentially over time. However, its presentation in men is less well understood, which can contribute to delayed diagnosis or misdiagnosis as other forms of alopecia in men.

In recent years, increasing reports of CCCA in men suggest that the condition may be underrecognized in this population.[2-5] We report the case of a 38-year-old man of African descent presenting with a multifocal patchy form of CCCA, rather than the classic centrifugal pattern. Recognizing atypical presentations of CCCA is critical for early and accurate diagnosis, which is essential to halt or slow disease progression and initiate appropriate therapy. This case underscores the need to consider CCCA in the differential diagnosis of multifocal patchy alopecia in men.

Case Synopsis

A 38-year-old man presented with an 8-year history of asymptomatic, non-pruritic, non-tender progressive hair loss. Family history was notable only for presumed male-pattern hair loss in his father. The patient had previously tried topical steroids without improvement. He reported no history of hair coloring, relaxers, hot combs, or high-tension hairstyles such as locs or braids. Physical examination revealed well-demarcated patches of hair loss on the frontal and vertex scalp, without erythema, scaling, or pustules (**Figure 1**), and no hair loss on the face or body. The patient was empirically treated with intralesional triamcinolone injections without discernible regrowth. Rapid plasma reagin (RPR) testing was negative.

A 4 mm punch biopsy of the left mid-scalp was performed. Histopathology demonstrated marked follicular dropout, mild chronic inflammation, and dermal scarring (**Figure 2**). Additional findings included perifollicular fibrosis and trichomalacia. Based on the biopsy findings and clinical context, a diagnosis of CCCA was established. The patient was counseled on gentle hair care practices and potential treatment options, including topical and systemic therapies for CCCA. Following the consultation, he opted not to pursue further treatment at this time.

Case Discussion

Although CCCA is classically described with a central, centrifugal pattern of hair loss, there is increasing recognition of varying clinical presentations. Other reported patterns include occipital, patchy, posterior vertex, and diffuse presentations, with prior studies suggesting that these non-classic features may be more prevalent in men with CCCA.[3] In a study of 17 men—the largest cohort reported to date—8 were found to have atypical disease distribution, including 2 patients with patchy CCCA similar to our patient, highlighting both the rarity and likely under-recognition of this condition in men.[3]

Atypical presentations are more easily misdiagnosed as other forms of alopecia, such as traction alopecia, par-

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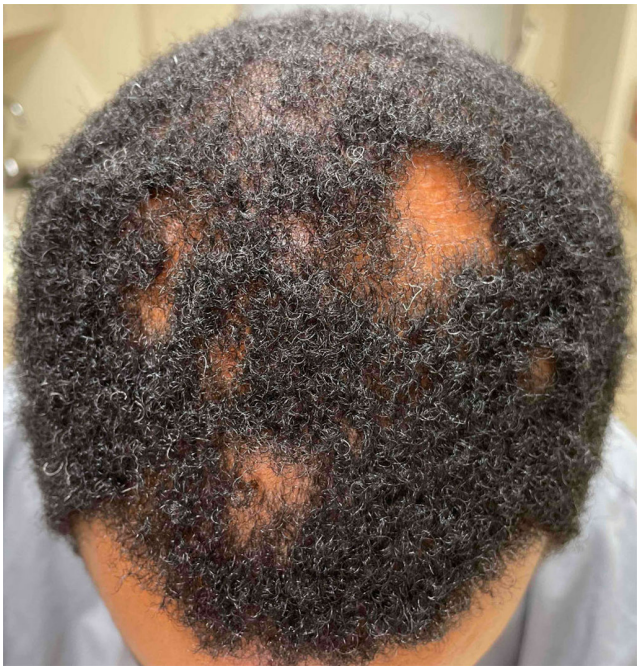

Figure 1. *Multifocal patchy distribution of hair loss on the frontal and vertex scalp.*

ticularly without dermoscopic or histopathologic evaluation, or androgenetic alopecia. In discrete patchy forms of CCCA, the differential may also include alopecia areata, alopecia syphilitica, or other scarring alopecias. Our patient was initially clinically diagnosed with alopecia areata and treated with intralesional triamcinolone with minimal improvement. No plasma cells were observed on biopsy, and RPR testing was negative; histopathology findings were consistent with CCCA, effectively ruling out alopecia syphilitica.[6] Notably, the patient reported no history of hair coloring, relaxers, straighteners, hot combs, or high-tension hairstyles. Prior studies of CCCA in men similarly indicate that most patients did not have a history of such hair care practices.[7]

This case emphasizes the importance of considering CCCA in men, even when presenting with atypical multifocal patchy alopecia. The variability in clinical presentation underscores the need for thorough diagnostic evaluation, including histopathology, to ensure accurate diagnosis and appropriate management. The limited literature on CCCA in men, along with emerging reports of atypical distribution patterns, highlights the need for further research to ensure that all clinical presentations of CCCA are appropriately recognized and diagnosed in both men and women.

Conclusion

We describe the case of CCCA in a 38-year-old man of African descent to highlight the need for increased awareness of the condition's variability in both sex and clinical presentation. Unlike the typical centrifugal pattern, the patient exhibited a multifocal patchy distribution of hair loss. The relative underreporting of CCCA in men, combined with its atypical presentation in the present case, suggests that CCCA may be underrecognized and underdiagnosed in men. This case underscores the importance of considering CCCA in younger men presenting with non-classic patterns of alopecia to ensure timely and appropriate diagnosis and management.

Potential conflicts of interest

Connie R. Shi, MD, FAAD, is a contributor to VisualDX. The remaining authors declare no conflicts of interest.

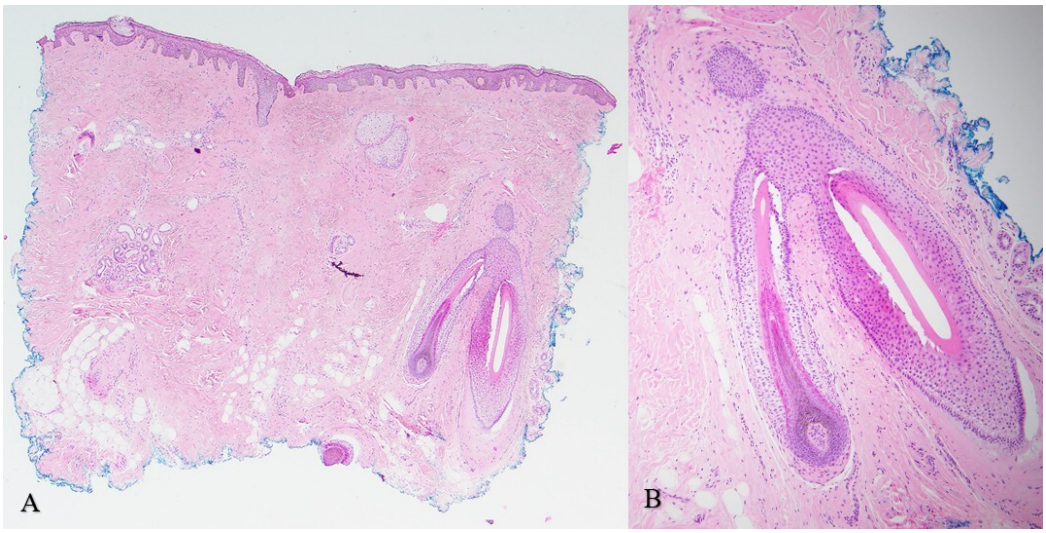

Figure 2. ***(A)*** *Punch biopsy from the vertex scalp shows marked follicular dropout and dermal fibrosis (hematoxylin-eosin, original magnification ×20).* ***(B)*** *Premature desquamation of the inner root sheath is also observed, a characteristic feature of CCCA (hematoxylin-eosin, original magnification ×100).*

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