

Central centrifugal cicatricial alopecia and the impact of wig prosthesis on patient quality of life: a case report with medical insurance appeal letter

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Dear Editors,

Central centrifugal cicatricial alopecia (CCCA) is scarring alopecia that results in gradual progression to permanent hair loss on the central crown and vertex scalp. Given its permanent destruction of hair follicles and physical disfigurement, CCCA negatively impacts patient quality of life (QOL). While treatments can limit or slow its progression, the scarring pathology is irreversible.¹ Utilization of a hair prosthesis, that is, wigs can improve patient QOL; however, effective and reliable wigs are cost prohibitive and infrequently covered by medical insurance.²

Herein we present the impact of wig hair prosthesis on a 70-year-old female patient with a history of biopsy-proven CCCA and androgenetic alopecia. This patient presented with a history of diffuse hair loss with areas of follicular dropout and scarring involving the crown of the scalp, vertex scalp, and parietal/frontal scalp (Fig. 1A and B). Scalp biopsy revealed lymphocyte-mediated scarring alopecia, consistent with CCCA (Fig. 1C). Due to substantial end-stage scarring, the patient reported diminished self-confidence and high embarrassment. She was initially prescribed oral doxycycline and topical steroids.

A wig hair prosthesis was later incorporated at the patient's expense after her health insurance provider informed her that a hair prosthesis would not be covered. The wig boosted her self-confidence such that she attended social events and started volunteer work. To determine the impact of the patient's wig, we used PHQ-9 and Skindex-29 scoring. PHQ-9, a self-administered measure of depression severity using Diagnostic and Statistical Manual of Mental Disorders-Version IV criteria, evaluated patient pre-wig and post-wig results.³ Prior to wig, the patient reported several days of "feeling down, depressed, or hopeless" and "feeling bad about herself—or that she is a failure or has let herself or her family down." In addition, patient reported more than half the days of "little interest or pleasure in doing things," and "poor appetite or overeating." These factors improved after wearing her wig, resulting in the resolution of all above-mentioned concerns pre-wig.

Pre-wig and post-wig PHQ-9 improved from a score of 6 (mild depression) to 1 (minimal depression). Pre-wig and post-wig Skindex-29 questionnaire improved from a score of 51 to

21 in emotions category (≥ 39 equals severely impaired health-related QOL) and 40 to 13 in functioning category (≥ 37 equals severely impaired health-related QOL).⁴ Her scarring alopecia also stabilized with topical steroids and oral doxycycline with minimal disease progression.

The theory of impression management was developed by an influential psychologist and sociologist, Erving Goffman, PhD. His theory states that individuals present themselves based on how they want to be perceived by others and indicates the social importance of self-image and wigs among patients who suffer from hair loss.⁵ In addition, people with alopecia suffer from psychological damage, including emotional stressors that affect personal, work, and social life. Hair prostheses significantly contribute to impression management in alopecia patients to address psychological burden. They are also effective alternatives to expensive hair loss medications and treatments.

However, wigs can be cost-prohibitive. Synthetic wigs typically range from \$30 to \$500, whereas natural-looking wigs made of human hair can cost from \$800 to \$3,000.⁶ We advocate for medical insurance companies to cover wig hair prostheses. To this end, we share an example insurance appeal letter (Supplemental Material, <http://links.lww.com/IJWD/A27>) for patient advocacy, ultimately contributing to improved mental health in patients with scarring hair loss.

What is known about this subject in regard to women and their families?

- Central centrifugal cicatricial alopecia is a permanent, irreversible scarring alopecia that negatively impacts patient quality of life (QOL).
- Utilization of hair prosthesis (wigs) can improve patient QOL.
- Quality wigs are costly and infrequently covered by medical insurance.

What is new from this article as messages for women and their families?

- We report a case example of a patient with central centrifugal cicatricial alopecia who experienced improved mood and QOL as measured by the PHQ-9 and Skindex-29 after implementation of a high-quality hair prosthesis.
- Within the supplemental material, we provide a sample insurance appeal letter that clinicians may submit to their patient's insurance company for the purpose of securing a hair prosthesis.

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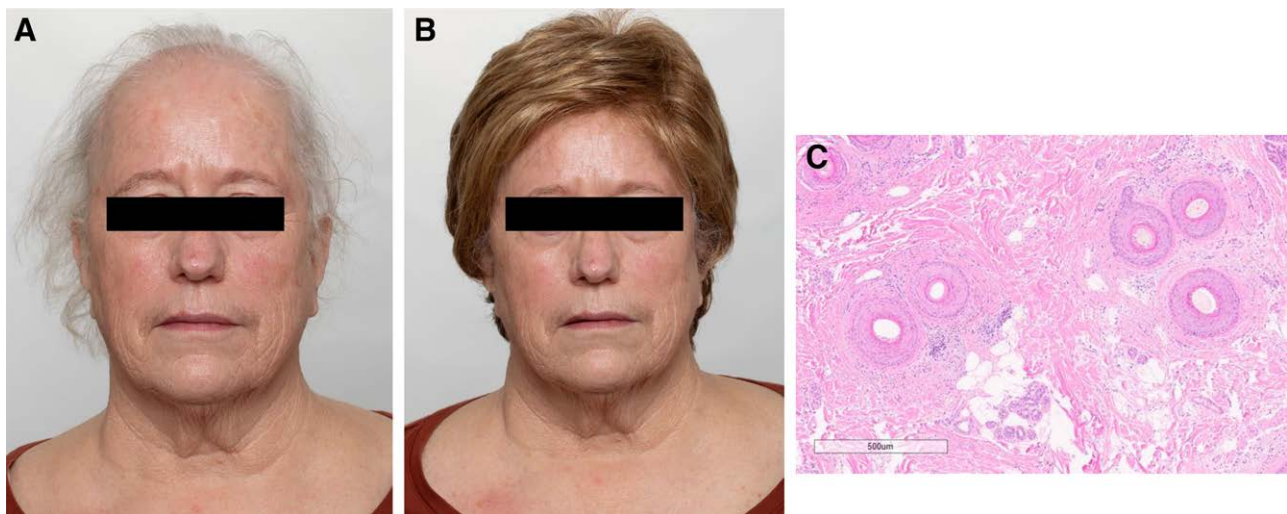


Fig. 1. Clinical and histological manifestation of central centrifugal cicatricial alopecia (CCCA). (A) 70-year-old female patient with CCCA prior to wig prosthesis. (B) Post-wig prosthesis. (C) Histopathological analysis revealed lymphocyte-mediated scarring alopecia with peri-infundibular lymphocytic inflammation, concentric lamellar fibrosis, follicular miniaturization, and increased numbers of follicular stellae.

Conflicts of interest

None.

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Study approval

N/A

Author contributions

JC: Participated in literature review and drafting of the manuscript. JLC: Participated in drafting the manuscript, creating figures, editing the manuscript, formatting the manuscript for publication, addressing reviewer comments and making manuscript revisions, and submitting the manuscript. SPW: Participated in patient's care, photograph formatting, manuscript revisions, and addressing reviewer comments.

Patient consent

Informed, written consent was received from all patients and confirmed to the journal pre-publication, stating that the patients gave consent for their photos and case history to be published.

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Supplementary data

Supplementary data related to this article can be found at <http://links.lww.com/IJWD/A27>.

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Janelle Chan^a

Jennifer L. Coias, MD^b

Saranya P. Wyles, MD, PhD^{b,c,*}

^a College of Human Ecology, Cornell University, Ithaca, New York

^b Department of Dermatology, Mayo Clinic, Rochester, Minnesota

^c Center for Regenerative Biotherapeutics, Mayo Clinic, Rochester, Minnesota

* Corresponding author.

E-mail address: wyles.saranya@mayo.edu (S. P. Wyles).