# Sisaipho alopecia areata treated with tofacitinib and oral minoxidil



Ronan Talty, BS, a,b William Damsky, MD, PhD, a,b and Brett King, MD, PhD

Key words: alopecia areata; JAK; JAK-STAT; Janus kinase; minoxidil; ophiasis; sisaipho; tofacitinib.

# **INTRODUCTION**

Alopecia areata (AA) is an autoimmune condition characterized by nonscarring hair loss that can be difficult to treat. Typical AA is characterized by round patches of alopecia on the scalp and, when severe, can manifest complete or near-complete hair loss on the scalp. AA may occur in distinctive patterns, such as the relatively common ophiasis AA, in which hair loss occurs in a band-like pattern on the occipital and temporal scalp. Sisaipho (ophiasis spelled backwards) is a rare variant of AA in which hair loss involves the top of the scalp, sparing the temporal and occipital areas.

Recently, Janus kinase (JAK) inhibitors have emerged as a promising treatment approach for AA.<sup>1-3</sup> However, the efficacy of this therapeutic approach for sisaipho AA has not been described. Here, we report a case of a woman with sisaipho AA who experienced near-complete hair regrowth with tofacitinib 5 mg twice daily.

# **CASE REPORT**

A 51-year-old woman with a 22-year history of AA presented for evaluation. Physical examination showed hair loss involving mainly the top of the scalp, with a Severity of Alopecia Tool (SALT) score of 50 (Fig 1, A). Her eyebrows and eyelashes were unaffected. She had previously been treated with intralesional triamcinolone without benefit. She was treated with combination spironolactone 100 mg twice daily and oral minoxidil 5 mg twice daily for 1 year without significant improvement.

Abbreviations used:

AA: alopecia areata JAK: Janus kinase

SALT: Severity of Alopecia Tool

Following a discussion of the potential risks, the patient was started on tofacitinib 5 mg twice daily while continuing the oral minoxidil and spironolactone. After 4 months, there was significant hair regrowth (Fig 1, B) that continued to improve over time (Fig 1, C).

### DISCUSSION

To our knowledge, this is the first report of a patient with sisaipho AA successfully treated with a JAK inhibitor (in combination with oral minoxidil). Prior reports have suggested that combination tofacitinib and oral minoxidil may be more effective than tofacitinib monotherapy for the treatment of AA. 4,5 It is significant that after nearly 22 years of fixed hair loss (ie, there had not been hair growth involving the top of the scalp since shortly after it occurred), she experienced near-complete regrowth in a relatively short period of time; we attribute this to combination treatment. Notably, a previous study included 3 patients with ophiasis pattern AA who achieved similar results with tofacitinib. This report adds to the growing literature demonstrating the efficacy of JAK inhibitors for the treatment of AA. 1-3

From the Department of Dermatology, Yale School of Medicine, New Haven, Connecticut<sup>a</sup>; and Department of Pathology, Yale School of Medicine, New Haven, Connecticut.<sup>b</sup>

Funding sources: There were no funding sources for this work. RT is supported by NIH F30CA254246-01A1. WD is supported by a Career Development Award from NIAMS (K08AI159229-01).

IRB approval status: Not applicable.

Consent information: The patient described consented to the publication of their photographs and medical information for the purpose of this report, and consent forms are on the file. Correspondence to: Brett King, MD, PhD, Department of Dermatology, Yale School of Medicine, 333 Cedar St, LCI 501,

PO Box 208059, New Haven, CT 06510. E-mail: brett.king@yale.edu.

JAAD Case Reports 2022;29:41-2.

2352-5126

© 2022 by the American Academy of Dermatology, Inc. Published by Elsevier, Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

https://doi.org/10.1016/j.jdcr.2022.08.037

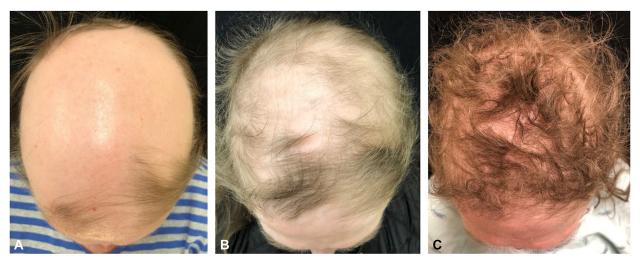


Fig 1. Clinical images showing the extent of scalp alopecia at presentation (A), after 4 months taking tofacitinib (**B**), and after 17 months taking tofacitinib (**C**).

#### Conflicts of interest

RT has no conflicts of interest to declare. WD has research funding from Pfizer, is a consultant for Eli Lilly and Twi Biotechnology, and receives licensing fees from EMD/Sigma/Millipore in unrelated work. BK has served on advisory boards and/or is a consultant and/or is a clinical trial investigator for AbbVie, Aclaris Therapeutics Inc, AltruBio Inc, Almirall, Arena Pharmaceuticals, Bioniz Therapeutics, Bristol-Meyers Squibb, Concert Pharmaceuticals Inc, Dermavant Sciences Inc, Eli Lilly and Company, Incyte Corp, LEO Pharma, Otsuka/Visterra Inc, Pfizer Inc, Regeneron, Sanofi Genzyme, TWi Biotechnology Inc, and Viela Bio. He is on speaker bureaus for Eli Lilly, Incyte, Pfizer, Regeneron, and Sanofi Genzyme.

- 1. Crispin MK, Ko JM, Craiglow BG, et al. Safety and efficacy of the JAK inhibitor tofacitinib citrate in patients with alopecia areata. JCI Insight. 2016;1:89776.
- 2. Jabbari A, Sansaricq F, Cerise J, et al. An open-label pilot study to evaluate the efficacy of tofacitinib in moderate to severe patch type alopecia areata, totalis and Universalis. J Invest Dermatol. 2018;138:1539-1545.
- 3. Liu LY, Craiglow BG, Dai F, King BA. Tofacitinib for the treatment of severe alopecia areata and variants: a study of 90 patients. J Am Acad Dermatol. 2017;76:22-28.
- 4. Wambier CG, Craiglow BG, King BA. Combination tofacitinib and oral minoxidil treatment for severe alopecia areata. J Am Acad Dermatol. 2021;85:743-745.
- 5. Sinclair RD. Female pattern hair loss: a pilot study investigating combination therapy with low-dose oral minoxidil and spironolactone. Int J Dermatol. 2018;57:104-109.