## Frontal Fibrosing Alopecia and Its Relationship with Facial Care Products: A Cross-Sectional Survey Study

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### BACKGROUND

- Frontal fibrosing alopecia (FFA) is a clinically distinct variant of lichen planopilaris and characterized as progressive scarring hair loss of the frontal hairline.
- Symptoms include pruritus, pain, or discomfort.
- Little evidence exists regarding triggers and correlated factors in its pathogenesis.
- Treatment options include finasteride/dutasteride, oral antimalarials, corticosteroids (topical, oral, and/or intralesional), and immunosuppressants such as methotrexate.



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### METHODS

- In this two-part cross-sectional survey study, an electronic medical record search from a large private community-based dermatology December 31, 2017.
- Adults 18 years or older with clinical and pathological diagnosis of
- and potential contributing factors. Respondents that reported using facial care products were further queried in a subsequent survey.

practice was performed identifying patients from January 1, 2005, to

FFA and without history of radiation or chemotherapy were included. • The initial survey collected patient demographics, clinical condition,

# SUNSCREEN USE

- respectively).

### REFERENCES

- Acad Dermatol. 1997;36:59-66.
- 1994;130(5): 770-774.
- 2020;82(3):723-728.
- 534.
- 2021;10(9):1805.



### RESULTS

• 49 of the 70 (70%) identified patients completed the initial survey. The mean age was 70.7 years with a median disease length of 3.4 years. The majority of respondents were postmenopausal, Caucasian females. Of significance, 75.5% (37 of 49) reported the use of facial sunscreens. 15 of those 37 respondents (38.5%) completed the second survey. The most reported ingredients included: Avobenzone (86.7%), Oxybenzone (73.3%), Octocrylene (66.7%), Octisalate (66.7%), Homosalate (53.3%), Octinoxate (46.7%), Zinc Oxide (40.0%), Dioxybenzone (6.7%), and Titanium Dioxide (6.7%). 73.3% respondents reported more than three times weekly use. Patients that reported hair loss after product use had a higher reported frequency use compared to those who did not (66.7% and 33.3%,

### CONCLUSION

 Although no statistically significant correlative relationship was established, our data trended toward a positive relationship.

 Our study with subanalysis identifies and compares active sunscreen ingredients, suggesting a potential relationship with FFA.

 Dermatologists should still recommend sunscreen use and can further explain through published studies how currently no direct causal relationship can be concluded.

• Future research may include longitudinal, prospective studies to monitor sunscreen use and development of scalp alopecia.

1. Kossard, S., Lee, M.S., Wilkinson, B. Postmenopausal frontal fibrosing alopecia: a frontal variant of lichen planopilaris. J Am

2. Kossard S. Postmenopausal frontal fibrosing alopecia. Scarring alopecia in a pattern distribution. Arch Dermatol.

3. Robinson G, McMichael A, Wang SQ, Lim HW. Sunscreen and frontal fibrosing alopecia: A review. J Am Acad Dermatol.

4. Aldoori, N., Dobson, K., Holden., C., McDonagh, A., Harries M., et al. Frontal fibrosing alopecia: possible association with leave-on facial skin care products and sunscreens; a questionnaire study. British Journal of Dermatology. 2016;175:762-767. 5. Imhof RL, Larkin SC, Cantwell HM, Torgerson RR, Tolkachjov SN. The association of frontal fibrosing alopecia with skin and hair care products: A survey-based case series of 56 patients seen at the Mayo Clinic. J Am Acad Dermatol. 2021;84(2):532-

6. Porriño-Bustamante ML, Fernández-Pugnaire MA, Arias-Santiago S. Frontal Fibrosing Alopecia: A Review. J Clin Med.

