

was the sole procedure performed in 73 cases in the office setting and 53 cases in the OR setting (Table II). Upon comparison of these identical cases, the average billing for insurance was found to be \$6605 for the office setting and \$23,694 for the OR setting ( $P \leq .01$ ). The average insurance payment was \$1419 for the office setting and \$2612 for the OR setting ( $P \leq .01$ ). No minor complications were identified in the office setting, whereas 4 (4.3%) were identified in the OR setting ( $P = .01$ ). No major complications were observed.

In the same hospital facility, the office-based WLE of melanoma was less expensive than OR-based WLE because of anesthesia costs and OR facility fees. The office-based surgeries had fewer complications, although the rates were low overall, and no major complications were reported in either group. WLE under general anesthesia in the OR setting resulted in a 258.71% higher average billing and 83.99% higher average reimbursement than the equivalent procedure under local anesthesia in the office setting.

The limitations of our study included its retrospective single-institution design and small sample size. Minor self-limited complications may have been missed because of variance in follow-up practices and documentation as well as less stringent office-setting reporting requirements. Cases with more complicated patient or tumor factors may have been preferentially referred to the OR. The reported costs in the office-based group were likely higher than average as there is a facility fee charged at our institution's office-based location. Additionally, we only compared the costs of WLE with those of immediate linear repair, although a greater percentage of cases in the OR were referred for repair. For these reasons, the cost difference between an average office and OR setting is likely greater than our calculations. Despite these limitations, this study provides evidence that the office-based WLE of melanoma leads to significant cost savings, with a noninferior complication rate compared with that of the equivalent procedure performed in the OR setting.

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Funding sources: None.

*IRB approval status: Approved by University of Alabama at Birmingham Institutional Review Board.*

*Reprints not available from the authors.*

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#### Conflicts of interest

None disclosed.

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<https://doi.org/10.1016/j.jaad.2021.04.075>

### Clinical features and sex hormone profile in male patients with frontal fibrosing alopecia: A multicenter retrospective study with 33 patients



*To the Editor:* Frontal fibrosing alopecia (FFA) is considered as a variant of lichen planopilaris with an unclear pathogenesis. First described in postmenopausal women, FFA has recently been reported in young men and women.<sup>1-5</sup> The recent worldwide incidence of this disease, mainly among women, raises the possibility of hormonal disruption by endogenous or exogenous factors.

This multicenter retrospective study aimed to describe the clinical features and sex hormone profile of men with FFA and no previous history of sex hormone disorders using a chart and image review from 2019 to 2021. All subjects were asked to have their hormone profiles prepared. The study was approved by the Ethics Committee of the University of Sao Paulo, Brazil.

This study included 33 male patients, all, except 1, with biopsy-proven FFA, a mean age of 53.1 (range 24-82) years, skin types from II to V, and a disease duration of <5 years (45.4%) and >5 years (54.5%). With respect to body mass index, 6.1% were obese, 36.3% were overweight, and 57.6% were normal. The most prevalent associated disorders were hypertension (24.2%), anxiety/depression disorder

**Table I.** Demographics, clinical features, and hormonal abnormalities of 33 male patients with FFA

Sex/Total n	Male/33
Mean age, years	53.1 (24-82)
Skin type	
I	0% (0/33)
II	36.3% (12/33)
III	42.4% (14/33)
IV	15.1% (5/33)
V	3% (1/33)
VI	0% (0/33)
Disease duration, years	
<5	45.4 % (15/33)
≥5	54.5% (18/33)
BMI	
Normal	57.6% (18/33)
Overweight	36.3% (12/33)
Obese	6.1% (2/33)
Associated disorders	
Hypertension	24.2% (8/33)
Anxiety/depression disorder	12.1% (4/33)
Hypothyroidism	9.1% (3/33)
Clinical lesions	
Frontotemporal alopecia	90.9% (30/33)
Loss of sideburns	69.6% (23/33)
Beard alopecia	69.6% (23/33)
Eyebrow alopecia	66.6% (22/33)
AGA	63.6% (21/33)
Extremity alopecia	60.6% (20/33)
Facial papules	42.4% (14/33)
Facial rosacea	33.3% (11/33)
Axillary alopecia	30.3% (10/33)
Occipital alopecia	21.2% (7/33)
Frontal veins	18.1% (6/33)
Scalp LPP	9% (3/33)
Cutaneous LP	6% (2/33)
LP pigmentosum	3% (1/33)
Nail LP	0% (0/33)
Oral LP	0% (0/33)
Hormonal abnormalities	
High progesterone	7.7% (1/13)
Low progesterone	7.7% (1/13)
High estradiol	7.7% (1/13)
Low estradiol	7.7% (1/13)
High SHBG	15.4% (2/13)
Low SHBG	0% (0/13)
High 17-OH	23.1% (3/13)
Low 17-OH	0% (0/13)
Insulin resistance	6% (2/33)
Current treatment	
Finasteride	12.1% (4/33)
Dutasteride	12.1% (4/33)
Minoxidil	9.1% (3/33)

Fitzpatrick skin types varied from II (fair skin) to V (dark skin) in this study. All patients (n = 33) had their glucose levels assessed in the basic laboratory profile; 34.9% (n = 13) underwent sex hormone tests. AGA, Androgenetic alopecia; BMI, body mass index; LP, lichen planus; LPP, lichen planopilaris; 17-OH, 17-hydroxyprogesterone; SHBG, sex hormone-binding protein.

(12.1%), and hypothyroidism (9.1%). The most frequent clinical findings were frontotemporal alopecia (90.9%) as well as beard and sideburn alopecia, both present in 69.7% of the patients. Scalp itching was present in 45.5% of the patients. Basic laboratory profiling, including complete blood count, ferritin, thyroid function (thyroid-stimulating hormone and free T4), and glucose levels, was performed in all the patients. Additional hormone blood tests, such as those for estradiol, progesterone, 17-hydroxyprogesterone, and sex hormone-binding protein, were performed in 39.4% (n = 13) of the patients. The results showed abnormalities in the sex hormone levels in 61.5% (n = 8/13) of the subjects who underwent the sex hormone tests; 75% of them (n = 6/13) were either obese or overweight and had FFA for at least 5 years (Table I).

There are limited data regarding FFA in men in the literature, especially those focusing on hormonal studies. The lack of beard and sideburns has been described as an early frequent sign of the disease in this population.<sup>1-4</sup> Only 1 study, including 7 men with FFA, has reported hypogonadism upon a study of testosterone levels in almost one third of patients with no associated autoimmune or thyroid disease.<sup>2</sup> In our study, no specific trend in the hormone test results was apparent. However, the preliminary finding of abnormal sex hormone levels, mainly in overweight/obese men with long-standing disease, associated androgenetic alopecia in more than 60% of our patients, and apparent high 17-hydroxyprogesterone levels suggest underlying hormonal involvement in this disease, by either a local mechanism (ie, end-organ hormone sensitivity) or systemic effects. Although the effect of obesity on sexual function has already been reported, the question whether endogenous or exogenous factors influence sex hormone pathways, disease progression, and the occurrence of specific clinical lesions remains to be ascertained. The limitations of this study include a lack of control group and the fact that the sex hormones tests were performed only in 39.4% of the patients.

In conclusion, further studies assessing the body mass index and sex hormone levels of patients with FFA are needed to better assess the potential risk factors and help with proper management.

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Funding sources: None.

IRB approval status: The study was approved by the Ethics Committee of the University of Sao Paulo Medical School, Brazil (number 32162620.7.0000.0068).

Reprints not available from the authors.

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#### Conflicts of interest

None disclosed.

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<https://doi.org/10.1016/j.jaad.2021.04.076>

## Increased risk of systemic and cardiac sarcoidosis in Black patients with cutaneous sarcoidosis



To the Editor: Sarcoidosis is a multisystem granulomatous disorder that disproportionately affects Black patients.<sup>1</sup> As the skin is the second most common organ affected in sarcoidosis, patients often present to dermatologists for initial diagnosis.<sup>2</sup> As a result, patients may have unrecognized extracutaneous involvement at the time of cutaneous sarcoidosis diagnosis. This study is the first to evaluate racial differences in systemic involvement among patients presenting to dermatologists for cutaneous sarcoidosis.

After approval by the Mass General Brigham Institutional Review Board, the research patient data registry, which combines medical records from Mass General Brigham hospitals, was used to identify 286 potential patients with cutaneous sarcoidosis between January 2000 and December 2019. Of these, 50 had biopsy-proven cutaneous sarcoidosis and presented to a dermatologist without established extracutaneous disease. From this cohort, data on demographics and extracutaneous involvement were extracted and analyzed, with *P* values <.05 considered statistically significant.

Forty-eight percent (24/50) of the patients were White, 18% (9/50) were Black, 18% (9/50) were Latinx, 4% (2/50) were Asian Pacific Islander, 2% (1/50) were Native American, and 10% (5/50) self-identified as other (Table I). Black patients were significantly younger than non-Black patients at the time of initial presentation for cutaneous sarcoidosis (36.9 ± 9.7 years vs 48.4 ± 12.7 years, respectively, *P* = .014). Black patients were 1.7 times more likely to be diagnosed with any extracutaneous involvement than non-Black patients (Table II. 78% [7/9] vs 46% [19/41], respectively, *P* = .044). Overall, there was a significant trend of Black patients having more extracutaneous organ systems involved than White patients (*P* = .049). Importantly, Black patients were significantly more likely to have cardiac involvement than non-Black patients (33% [2/6] vs 0% [0/25], respectively, *P* = .032).

In conclusion, our study highlights several differences between Black and non-Black patients presenting to dermatologists for cutaneous sarcoidosis. Similar to a prior study, including Black patients with sarcoidosis presenting to ophthalmologists,<sup>3</sup> we showed that Black patients are significantly younger at the time of presentation to dermatologists. To the best of our knowledge, our study is the first to show that Black patients with cutaneous sarcoidosis are significantly more likely to have undiagnosed