

Frontal Fibrosing Alopecia in Males: The Series to Date

Frontal fibrosing alopecia (FFA) is a type of scarring alopecia that causes hair loss along the frontal hairline and sideburns but can also affect the back of the scalp, eyebrows, eyelashes and body hair. For every 100 patients that I see with a diagnosis of FFA, 97 patients are women and 3 patients are male. I am seeing a very slightly greater proportion of male patients in recent years with FFA and so this ratio has changed a bit. Perhaps 5 years ago, I would have said that ratio was 99 to 1 but it's no longer. Of course, we still have no idea what causes FFA so I can't really give a clear reason why more male patients are being diagnosed with this either.

Let's take a look at some of the studies that have been published of males with FFA and then I'll close with some key summary points.

STUDY 1: Ormaechea-Perez et al, 2016

In 2016, Ormaechea-Perez and colleagues studied 12 men (mean age was 75 years) with FFA. About one half of the patients had facial papules, and 83% had androgenetic alopecia (male balding) or hair loss on eyebrows or extremities. Only 25% of the men reported pruritus. The most commonly prescribed treatments were topical corticosteroids in 8 patients (66%) and topical minoxidil in 4 (33%).

In this study facial papules, androgenetic alopecia, and loss of body hair were more often observed in men with FFA than in women. The men in this series were older on average than in other FFA case series in the literature, possibly accounting for the higher prevalence of associated androgenetic alopecia.

STUDY 2: Alegre-Sanchez et al, 2017

In 2017, Alegre-Sanchez reported clinical findings of 12 male patients with FFA. The average age was 47.3 and this ranged from 21 up to 73. These 12 patients had their disease for an average of 5.6 years with a range 1 to 21 years.

Eyebrow loss was noted in 58 % of patients (i.e. 7 of 12 patients), body hair loss in 42 % of patients (i.e. 5 of 12 patients), beard loss in 42 % of patients (i.e. 5 of 12 patients). Facial papules were noted in 33 % of patients (i.e. 4 of 12 patients). 67 % of patients had androgenetic hair loss (i.e. 8 of 12 patients). None of the 12 patients had hypothyroidism or a positive ANA.

STUDY 3: Tolkachjov et al, 2017

In 2017, Tolkachjov and colleagues performed a study of 7 male patients with frontal fibrosing alopecia to gain a better understanding of how these patients present and what type of hormonal or endocrine abnormalities might be present.

Of the 7 patients, 4 showed loss of the sideburns, 3 showed loss of eyebrows, 2 showed loss of hair in the occipital scalp. 1 patient had hair loss on the legs, 1 had hair loss on the arms and 1 had loss of hair from the upper lip. None of the 7 patients in this study had facial papules and only 1 had androgenetic alopecia. Interestingly, none have evidence of thyroid disease and none had low total testosterone levels (although 2 had evidence of low free testosterone). All patients were ANA negative or only weakly positive.

Of the 7 patients, 4 started systemic therapy with oral hydroxychloroquine and 3 of these patients were able to achieve disease stabilization with use of this drug.

STUDY 4: Peterson et al, 2020

In 2020, Peterson reported findings of 7 male patients with FFA. Average age was 53, and patients ranged from 40 to 67.

Facial papules were present in 4 of 7 patients (57 %), and scalp lichen planopilaris was present in 5 of 7 patients (57%). Eyebrow involvement occurred in 5 of 7 patients (57%). Body hair loss noted in 3 of 7 patients (43%). None of the 7 patients had nail involvement.

Androgenetic alopecia was present in 57 % of patients (5 of 7) and alopecia areata was present in 29 % (2 of 7). Oral lichen planus was present in 1 of 7 (14 %). Endocrine issues were not reported so the frequency of low testosterone is not given.

The most common treatments that felt to be involved in achieving disease stabilization were steroid injections (7 patients, 100%), clobetasol (7 patients, 100%), minoxidil (6 patients, 86 %), topical tacrolimus (5 patients, 57%), doxycycline (3 patients, 43%), finasteride 1mg (3 patients 42%), pioglitazone (2 patients, 29%), isotretinoin (1 patient, 14%), hydroxychloroquine (1 patient, 14%), PRP (1 patient, 14 %), low dose naltrexone (1 patient, 14 %).

In this study, the mean time to initial treatment response was 3 months but ranged from 1 month to 1 year. All patients in this study had a complete response with the time to complete response being 5 months (range was from 1 month to 14 months). The mean treatment duration was 14 months with a range, 1 to 51 months).

Overall this was an interesting study. The study highlights that beard hair thinning, eyebrow thinning and body hair loss are sometimes seen in males in FFA and must be asked about by clinicians. Facial papules were common in this particular study but whether they are truly all that common in male FFA will need to be studied further. A large proportion of males with FFA have scalp LPP so this always needs to be evaluated. A full scalp examination is necessary for anyone with any hair loss anywhere but especially in FFA to search for scarring alopecia elsewhere. It's not surprising that a majority of males had androgenetic alopecia given how common androgenetic alopecia is in the general population and the more advanced age of this study group. What is surprising is the high proportion of males with FFA who also had alopecia areata (2 of 7).

It's challenging in this study to determine which of the individual treatments actually had a role. Minoxidil, finasteride, steroid injections and clobetasol were commonly used in those who responded to treatment so these likely had an important contribution to disease stabilization. Finally, this study did not evaluate associated endocrine or other issues.

All 7 of these patients had complete responses. I don't think the follow up was long enough for all patients nor the study size big enough to confidently lead us to believe that FFA in males is easy to treat and that all should respond in an average of 5 months. I think this cannot be concluded here.

What can be concluded is that good options exist and that typical options used for women with FFA are very much a part of the treatment algorithms for males.

STUDY 5: Westphal et al, 2021

The most recent study was a study of 35 patients with frontal fibrosing alopecia. This is one of the largest studies of male FFA to date. What was particularly nice about this study is that the authors included a control group of 60 patients without FFA. This control group allowed the authors to better understand some of the risk factors.

Of the 35 males with FFA, 74 % had involvement of the frontal hairline (i.e. 25 of 35 patients), 68 % had eyebrow loss (i.e. 23 of 35 patients), 32 % had involvement of the beard (i.e. 11 of 35 patients), 35 % had sideburn hair loss (i.e. 12 of 35 patients), 18 % had occipital hair loss (i.e. 6 of 35 patients). Facial papules were noted in 21 % (i.e. 7 of 35 patients), hair loss was noted on the lower limbs in 44 % (i.e. 15 of 35 patients), on the upper limbs in 26 % (i.e. 9 of 35 patients), and on the chest in 3 % (i.e. 1 of 35 patients).

When the authors compared the use of facial moisturizers, sunscreens or other skin care products in men with FFA compared to controls, there was no statistically significant difference in patterns of use.

STUDY 6: Lobata-Berezo et al, 2021

In 2021, Lobata-Berezo published a study of 39 male patients with FFA. 76.9 % of patients (i.e. 30 of 39) had androgenetic alopecia. The mean age was 69 (range 46-89 and patients) and patients had their FFA for an average of 7. 1 years.

Sites of involvement were somewhat similar to other studies. Sideburn hair loss was present in 89.7% of patients (i.e. 35 of 39), beard hair loss in 74.4 % (i.e. 29 of 39), eyebrow loss in 94.9 % (i.e. 37 of 39), body hair loss in 59 % (i.e. 23 of 39), occipital hair loss in 23 % (i.e. 9 of 39), and eyelash loss in 2.6 % (i.e. 1 of 39). Facial papules were noted in 33 % of patients (i.e. 13 of 39). Depression of the forehead veins was noted in 12.8 % (i.e.5 of 39).

There were several important associations that were studied. Hypothyroidism was noted in 5.1 % of patients (i.e. 2 of 39), benign prostate enlargement was noted in 33 % (i.e. 13 of 39), and prostate cancer was noted in 15.4 % (i.e. 6 of 39). 3 of the patients with prostate cancer had undergone treatment with antiandrogen drugs including bicalutamide, goserelin and triptorelin before the start of the FFA. Rosacea was noted in 30.8 % of patients (i.e. 12 of 39).

The Lobato-Berezo study did not assess hormone levels in much depth. Of a small number of males who did have hormone testing most had normal hormones. A small number of those tested had low testosterone but given that 10 % of healthy males in the 40s have low testosterone anyways (rising to 20 % in the 60s and 30 % in the 70s), it's difficult to know if really there is all that much of a difference in testosterone levels in males with FFA. It doesn't seem to be.

STUDY 7: Doche et al, 2021

Doche and colleagues reported the clinical findings of 33 male patients with FFA. The average age was 53.1 years with a range 24-82). 57 % of patients were normal weight. 36.3 % were overweight and 6.1 % were obese. 63.6 % of patients had androgenetic hair loss.

90 % hair frontal hair loss (i.e. 30 of 33 patients), 69.7 % had beard hair loss (i.e. 23 of 33 patients), 69.7 % had sideburn hair loss (i.e. 23 of 33 patients), 66.6 % had eyebrow hair loss (i.e. 22 of 33 patients), 21.2 % had occipital hair loss (i.e. 7 of 33 patients), and 30.3 % had axillary hair loss (i.e. 10 of 33 patients). Scalp LPP was noted in 27.2 % of patient (i.e. 9 of 33 patients), and 6 % had cutaneous lichen planus (i.e. 6 of 33 patients). None of the patients in this study had oral or nail lichen planus. Facial papules were noted in 42.4 % of patients (i.e. 14 of 33 patients),

There were several disease comorbidities that were evaluated. Hypertension was noted in 24.2 % of patients, depression was noted in 12.1 % and hypothyroidism was present in 9 %. Rosacea was noted in 33.3 % of patients (i.e. 11 of 33 patients). This was not a case controlled study design so we don't really know if these numbers differ from the general population.

A very small proportion of the patients in the study had hormonal abnormalities but the study was too small and not controlled to really assess the precise significance of these observations. It was interesting that a large majority of patients who did have hormonal abnormalities were obese.

STUDY 8: Bernardez et al, 2021

Bernardez and colleagues studied beard hair loss in 20 males. The average age was 52 with a range from 30 to 72). Androgenetic hair loss was present in 70 % of patients. The lateral cheek was a common area of hair loss with 100 % of patients affected. The sideburn was affected in 90 % of males. The moustache was affected in 90 % of males, although the very central area was often spared. The chin area was affected less commonly with only 60 % reporting hair loss. Facial papules were present in 70 %.

STUDY 9 : Rayinda et al, 2021

Rayinda and colleagues reported data on 17 males with FFA. Eyebrow loss was present in 65 % of patients (11 of 17 patients), eyelash loss in 12 % (2 of 17 patients), limb hair loss in 59 % (10 of 17 patients), and facial hair loss in 65 % (11 of 17 patients). Facial papules were present in 47 % (8 of 17 patients). Oral lichen planus was present in 6 % of patient (1 of 17 patients), vitiligo in 6 % (1 of 17 patients) and lichen sclerosus was present in 6% (1 of 17 patients). Androgenetic alopecia was noted in 18 % (3 of 17 patients). Lab abnormalities were studied. Low testosterone was present in 18 % (3 of 17 patients), abnormal SHGB in 24 % (4 of 17 patients). Overall, the data are similar for the most part to the other FFA studies in males. However, this study does highlight the possibility of oral lichen planus and lichen sclerosus in male patients with FFA.

STUDY 10: Moussa et al, 2022

Authors from Australia set out to evaluation the clinical characteristics and response to treatment of FFA in men. They retrospectively reviewed the records of men with FFA who were seen over a 10 year period from October 2011 and December 2021.

Thirteen patients with FFA were identified. The mean age of disease onset was 40.5 years (range, 29–66 years). Recession of the anterior hairline was present in all patients. Other areas affected by hair loss included the beard (92.3%), sideburns (76.9%), eyebrows (76.9%) and eyelashes (15.4%),

Pruritus was present in five cases (38.5%) and trichodynia was reported in two cases (15.4%), Trichoscopically, perifollicular erythema and follicular hyperkeratosis were observed in eight (61.5%) and nine patients (69.2%), respectively. Facial papules were seen in five patients (38.5%). 30.8% had rosacea. Three patients (23.1%) had concurrent androgenetic alopecia (AGA).

The mean duration of follow-up was 26.5 months.

All 13 patients were treated with oral minoxidil. The chosen doses ranged from 0.25 to 10 mg daily with a mean dose 2 mg. In 12 patients, oral minoxidil was combined with an oral 5 α -reductase inhibitor. In 7 patients, this was finasteride (0.25 mg to 1 mg daily with mean dose 0.6 mg) and in 5 cases this was dutasteride (0.25 to 0.5 mg daily with mean dose 0.4 mg).

Four patients were treated with a class I topical corticosteroid (clobetasol propionate 0.05%). Other immunomodulatory and anti-inflammatory therapies included cyclosporine (1 patient only), minocycline (1 patient), and topical tacrolimus (1 patient). Disease stabilization was noted in eight patients (61.5%) after a mean duration of 6.0 months. An increase in hair density was also observed in two of the three patients with concurrent AGA. No adverse events due to treatment were observed during the follow-up period.

Comments.

This was an interesting study. The study highlights again how common beard hair loss, sideburn hair loss and eyebrow hair loss are in males with FFA. It's difficult to attach benefit to oral minoxidil or finasteride or dutasteride in this study given that so many patients used oral minoxidil with a 5 alpha reductase inhibitor. I think the authors would like to make a case that oral minoxidil is worth adding in cases of FFA but the data is not structured in a way that really allows us to make that case.

It's reassuring to see that such a high proportion of patients achieve stabilization. The data in this paper would suggest that stabilization occurs faster with dutasteride (3-4 months) than finasteride (6-7 months) but numbers are small and it's not really possible to make that in any solid confirmatory manner. These are areas for further study.

It does seem in this paper by Moussa and colleagues that the authors try to make a case that topical minoxidil is probably less useful in FFA than oral minoxidil. They first remind us that based on previous reports, topical minoxidil monotherapy appears of little

benefit in halting FFA progression. This is true. However, when we look at the 2019 report by Garmet et al that they quote we see the authors state that “Based on these findings it is reasonable to conclude that (topical) minoxidil may be most beneficial when combined with other therapies for the treatment of FFA and when there is a condition of mixed FFA and androgenetic alopecia, which is common.

The reality is that in this study by Moussa and colleagues we don't really have much good evidence that oral minoxidil monotherapy is helpful and we really only have data that suggests that just like topical minoxidil it too is beneficial when combined with other therapies.

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