CHAPTER 5

Treating Female Pattern Hair Loss

Richard A.K. Chaffoo, MD, FACS, FICS, and Susan M. Stuart, MD, FAAD | California Hair MD

Numbered citations in parentheses refer to the list in Chapter 10: References.

What Are the Best Treatments for Hair Loss in Women?

One of the most important messages we give our patients is that **hair loss in women is not a single disease, and there is no single treatment that is appropriate for every woman**. Successful treatment begins with identifying the specific cause—or, quite often, the combination of causes—responsible for the hair loss. At California Hair MD, Susan M. Stuart, MD, FAAD, a board-certified dermatologist, and Richard A.K. Chaffoo, MD, FACS, FICS, a triple board-certified hair transplant plastic surgeon, **evaluate each patient from both a dermatologic and hair-restoration perspective**. This combined approach is particularly important because a woman may have female pattern hair loss together with telogen effluvium, a nutritional or hormonal abnormality, medication-related shedding, or an inflammatory scalp condition occurring at the same time.

How Female Pattern Hair Loss Is Treated

For female pattern hair loss, our goals are to **slow further thinning and improve growth from follicles that are still functioning**. We choose treatment according to the patient's medical history, preferences, and tolerance. [76]

How Minoxidil Is Used for Female Pattern Hair Loss

We explain to patients that **topical minoxidil does not work equally well for everyone**. It must be converted within the hair follicle to its active form, minoxidil sulfate, by enzymes called sulfotransferases. Some patients have lower activity of these enzymes, which may help explain why they see little improvement despite using the medication consistently. [76]

In our clinical experience, oral minoxidil has produced greater improvement in hair density than topical minoxidil in many of our patients. Some women find applying the solution to the scalp to be messy, difficult to fit into their routine, or disruptive to hairstyling, particularly when twice-daily application is prescribed. However, some topical formulations for women are used once daily. Topical minoxidil can also lead to scalp itching, irritation, or flaking. [76]

On the other hand, oral minoxidil is absorbed into the bloodstream and **avoids the need to penetrate the scalp**. It still requires conversion to minoxidil sulfate, but activation in tissues outside the scalp may help some patients who respond poorly to topical treatment. This mechanism is still being studied, and oral minoxidil does not work for everyone. [77]

In our practice, I usually start women on low-dose oral minoxidil at 0.625 mg daily and reassess them after three months. Depending on their response and tolerance, I may gradually increase the dose to a maximum of 2.5 mg daily. Higher doses may improve hair growth but

can also increase unwanted facial or body hair. If a patient is already taking medication for high blood pressure, I will obtain medical clearance from her primary care physician before starting them on oral minoxidil. We adjust treatment for each patient, **ensuring we maintain the balance between improvement and side effects**.

We obtain baseline medical-grade photographs and HairMetrix measurements of hair density, hair-shaft width, and the degree of miniaturization before starting treatment. We repeat the photographs and measurements during follow-up so that our patients and we can see the changes over time. This allows us to document the response and decide whether treatment should be continued or adjusted.

Low-dose oral minoxidil is generally well tolerated. Unwanted facial or body hair (hirsutism) is the most common side effect and is more likely at higher doses. Less common cardiovascular effects include lightheadedness, ankle swelling, and palpitations. [78] In our practice, these symptoms are uncommon. This is because **we start each patient with a low dose and increase it cautiously**.

Pericardial effusion, or fluid accumulation around the heart, is a rare but potentially serious complication reported even with low doses. Patients should seek prompt medical attention for chest pain, shortness of breath, or significant swelling. [79]

We explain to our patients that **improvements with minoxidil take time**. Some women notice a temporary increase in shedding after starting treatment, which does not necessarily mean the medication is failing. At the three-month visit, we assess tolerance and early response, although **it may take six months or longer to truly judge the benefits**. Results vary, and slowing or stopping further thinning can be a useful outcome even when regrowth is modest. For female pattern hair loss, **continued treatment is generally necessary to maintain the benefit**. [76, 80]

We always explain to patients that **oral minoxidil is prescribed off-label for hair loss**. It was originally developed and FDA-approved as an oral antihypertensive, but it is no longer used as a traditional blood pressure medication because better antihypertensive options are now available; the doses we use for hair loss are much lower than those historically used for hypertension. Prescribing approved medications for other conditions is common in medicine, and we discuss the potential benefits and risks with each patient. A low dose does not eliminate the possibility of side effects. We do not recommend minoxidil during pregnancy or breastfeeding because adequate safety data are lacking. We also ask patients to let us know if they are planning pregnancy so that we can discuss stopping their treatment beforehand. [80]

Spironolactone for Female Pattern Hair Loss

Dr. Stuart also prescribes spironolactone for selected women with female pattern hair loss, often alongside minoxidil. **It blocks androgen receptors**, reducing the effects of these hormones on susceptible hair follicles. It may be particularly useful when thinning is accompanied by acne or increased facial hair, although an elevated testosterone level is not required. Its use for hair loss is off-label. [12, 76]

Published regimens commonly start at 25–50 mg daily, with treatment doses often ranging from 100–200 mg daily. These are general ranges, not a recommendation for every patient. [76] Dr. Stuart determines the starting dose and any increases individually, considering medical history, blood pressure, kidney function, potassium levels, other medications, and tolerance. It may be taken once daily or in divided doses. We assess improvement over six to twelve months with medical-grade photographs and HairMetrix

measurements. A small randomized trial found that 100 mg daily could provide additional benefit alongside topical minoxidil, although not all measures of improvement reached statistical significance. [81]

Possible side effects include increased urination, dizziness, breast tenderness, and irregular menstrual periods. Spironolactone can also raise potassium levels and affect kidney function. It should not be used in patients with elevated potassium, Addison's disease, or concurrent eplerenone, and we avoid it during pregnancy. Significant kidney impairment or low blood pressure may also make it unsuitable. We review medications and supplements that could increase potassium or lower blood pressure and obtain baseline and follow-up testing as appropriate. The prescribing information recommends checking potassium within one week of starting treatment or increasing the dose, with continued monitoring based on the patient's risk factors. [82]

How We Use Finasteride for Female Pattern Hair Loss

In our practice, **we reserve finasteride for selected postmenopausal women with female pattern hair loss** and usually prescribe 2.5 mg once daily. Finasteride inhibits an enzyme called type II 5-alpha reductase, **reducing the conversion of testosterone to dihydrotestosterone, or DHT**. This may reduce androgen-related miniaturization in susceptible hair follicles. Its use for female pattern hair loss is off-label. [83]

The 1 mg daily dose commonly used for male pattern hair loss did not demonstrate benefit in a randomized study of 137 postmenopausal women after one year. [84] Smaller studies using 2.5–5 mg daily have reported improvement, although the evidence is less conclusive and results vary. [76] In one frequently cited study, women taking 2.5 mg

daily also used an antiandrogenic oral contraceptive, so the contribution of finasteride alone could not be determined. [85] We explain these limitations when discussing treatment.

We do not prescribe finasteride to premenopausal women because of the risk of fetal harm if pregnancy occurs. Women who are pregnant or could become pregnant should not handle crushed or broken finasteride tablets. [83]

We ask that you discuss any side effects with us, including reduced sexual desire, which has been reported in studies of women taking finasteride. The available evidence does not establish that higher doses necessarily cause more libido problems in women. [86] We also ask patients to report breast tenderness, a breast lump or nipple discharge, or mood changes. [83]

We assess the response to finasteride over six to twelve months with medical-grade photographs, HairMetrix measurements, and tolerance reviews during follow-up appointments. Some patients may notice stabilization rather than substantial regrowth. **Continued treatment is generally needed** to maintain the benefit. [76]