

FEMALE PATTERN HAIR LOSS

YOU HAVE BEEN DIAGNOSED WITH FEMALE PATTERN HAIR LOSS (ANDROGENETIC ALOPECIA)



WHAT IS IT?

The term alopecia refers to hair loss. There are several different types of alopecia. When the cause of hair loss is related to hormones (androgens) and genetics, it is called androgenic alopecia. About one-third of women experience hair loss at some time in their lives. Among post-menopausal women, as many as two-thirds suffer hair thinning or bald spots. In women, androgenetic alopecia begins with gradual thinning at the part line, followed by increasing hair loss radiating from the top of the head. A woman's hairline rarely recedes, and women rarely become bald.

HOW DID I GET IT?

There are many potential causes of hair loss, including medical conditions, medications, and physical or emotional stress. Androgenetic alopecia occurs because of a genetically determined shortening of your hair's growing phase called anagen. It takes longer for your hair to start growing back after it is shed in the course of the normal growth cycle (see Life Cycle of Hair). The hair follicle itself also changes, shrinking and producing a shorter, thinner hair shaft — a process called follicular miniaturization. As a result, thicker, pigmented, longer-lived "terminal" hairs are replaced by shorter, thinner, non-pigmented hairs called "vellus."

HOW IS IT DIAGNOSED?

Your doctor will take a medical history and examine the scalp. She will observe the pattern of hair loss, check for signs of inflammation or infection, and possibly order blood tests to investigate other possible causes of hair loss, including hyperthyroidism, hypothyroidism, and iron deficiency and hormone imbalance.

TREATMENT

Supplements

Many supplements, including biotin and folic acid, specific omega-3 fatty acids, omega-6 fatty acids, and antioxidants are said to help grow and thicken hair. In some women, iron deficiency could be a cause of hair loss. Your clinician may test your iron level, particularly if you're a vegetarian, have a history of anemia, or have heavy menstrual bleeding.

Hair Loss Shampoos

While hair loss shampoos cannot regrow hair, or prevent hair loss from worsening they can

- Help your hair hold moisture, which makes hair look fuller and thicker
- Lessen breakage, which can reduce thinning

Medicated Shampoos

Minoxidil 5% (Rogaine, generic versions). Minoxidil can produce some new growth of fine hair in some, but not all,

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people. However, it can't restore the full density of the lost hair. It can take two months before you see any results and the effect often peaks at around four months. If minoxidil works for you, you'll need to keep using it to maintain those results. If you stop, you'll start to lose hair again.

Directions for Minoxidil

Be sure that your hair and scalp are dry. Using the dropper or spray pump that's provided with the over-the-counter solution, apply it twice daily to every area where your hair is thinning. Gently massage it into the scalp with your fingers so it can reach the hair follicles. Then air-dry your hair, wash your hands thoroughly, and wash off any solution that has dripped onto your forehead or face. Don't shampoo for at least four hours afterwards.

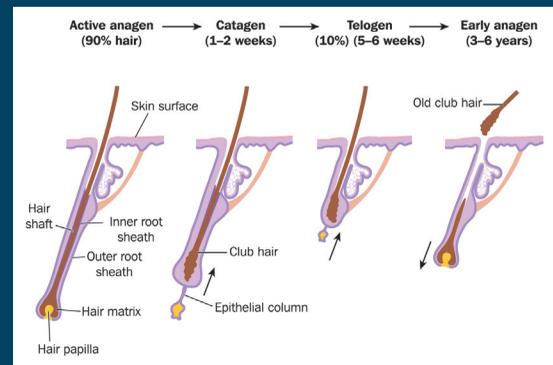
Possible side effects:

- Scalp Irritation: Some women have scalp irritation probably caused by the alcohol in the solution. Using the foam version seems to cause less irritation than the liquid.
- Sometimes the new hair differs in color and texture from surrounding hair.
- Hypertrichosis — excessive hair growth in the wrong places, such as the cheeks or forehead.

Anti-androgens

Androgen receptor-blocking drugs such as **spironolactone (Aldactone)** and **finasteride (Propecia)** act in two ways. First, it slows down the production of androgens in the adrenal glands and ovaries. Second, it blocks the action of androgens in part by preventing dihydrotestosterone (DHT) from binding to its androgenetic receptor. Case studies suggest that women who don't respond to minoxidil may benefit from the addition of spironolactone. In the relatively uncommon cases where there is an excess of androgen, a clinician may prescribe an androgen receptor-blocking drug daily. Possible side effects include weight gain, loss of libido, depression, and fatigue.

LIFE CYCLE OF A HAIR



All hair follicles are replaced at different rates by the normal process of hair cycling. Hair growth alternates between phases of activity and rest.

Anagen phase - the growth period of hair that lasts for two to six years. During this time, the follicle is long and deep and produces thick, well-pigmented hair. About 90% of all scalp hairs are in the anagen phase at a given time.

Catagen phase (which lasts 1-2 weeks) is a brief transition phase. During this time, the base of the follicle shrivels.

Telogen phase is the resting period lasts for three months. In this phase, the shrunken follicle retains the hair fiber.

When the anagen phase begins again, the old hair is dislodged and falls out to make room for a new hair to begin growing in its place.