

Learn about Androgenetic Alopecia (hair loss)

By:

Manuela Castrillón Bustamante, Mariana Duque Mesa, Susana Marín Machado, Susana Morales Galeano, María del Mar Paz Uribe. Undergraduate Medicine Students. School of Life Sciences, EIA University.

Reviewed by:

Juan Guillermo Hoyos Gaviria - Dermatologist at Salud VID



1. What is androgenetic alopecia and how does it manifest?

It is the most common type of hair loss. It occurs when, due to family inheritance, the follicles (where hair is born) become smaller due to the action of a hormone called dihydrotestosterone (DHT). This hormone shortens the hair growth phase (anagen phase), making each hair thinner, shorter, and, over time, causing it to stop growing.

How does it manifest in men?:

- Hair begins to fall out at the receding hairline (the sides of the forehead).
- It is also lost at the crown (the top and back of the head).
- Over time, these hairless areas may merge, leaving hair only on the sides and back.

How does it manifest in women?

- Hair loss in women usually begins along the middle part (the hairstyle line). Gradually, that line widens, and the hair on top becomes thinner and loses volume.
- The forehead almost always retains the hairline, but the scalp becomes more noticeable.
- In some cases, the thinning forms a pattern similar to a "Christmas tree" when viewed from above.

2. Who can develop androgenetic alopecia?

It can affect anyone, both men and women, being slightly more frequent in men. The more advanced the age, the higher the probability of it occurring. Additionally, there are hereditary factors from the father or mother who suffer or suffered from it.

3. What is the cause or causes of androgenetic alopecia?

There are mainly two important causes to understand why hair becomes increasingly weaker over time:

- **Hormonal cause:** The key hormone in this process is dihydrotestosterone (DHT), which acts on the hair follicle receptors and causes them to shrink gradually; consequently, the hair that grows becomes thinner, shorter, and less pigmented.
- **Hereditary (genetic) cause:** If there are men or women in the family with hair loss, especially first-degree relatives, certain genes can be inherited which, when interacting and being influenced by environmental factors, become more sensitive to the DHT hormone. The more sensitivity and affinity the hair follicle has for this hormone, the more likely alopecia (baldness) will appear.

What complications can androgenetic alopecia cause?

Androgenetic alopecia can generate discomfort and changes that affect personal appearance and how a person feels.

- **On the skin and hair:** Over time, more hair can be lost until reaching very sparse areas; the scalp becomes more exposed to the sun, which facilitates burns and skin aging, and even increases the risk of pre-cancerous lesions.
- **In appearance:** It makes the hair look thin, changes the way the face is framed, and can give an older appearance.
- **Emotionally:** Many people feel less confident, with low self-esteem, and this can generate sadness, anxiety, and the avoidance of certain social situations.

5. When to consult a professional?

It is important to understand that androgenetic alopecia does not have an impact on general health, as its affection does not go beyond hair loss: therefore, it is only necessary to consult if this situation is affecting your self-esteem and you wish to be treated.

However, it is necessary to consult if you notice that the hair loss is associated with any other sign or symptom such as: redness, pus-filled bumps, scabs, scalp pain, or symptoms such as tiredness/fatigue, weight loss (unintentional), fever, or weakness; as it could be associated with a more complex disease that requires immediate attention.

6. How is androgenetic alopecia diagnosed?

The diagnosis must be made by a general practitioner or a dermatologist.

- First, they will review your medical history, inquiring when the hair loss began, in which areas of the head it occurs, if it is sudden or progressive, and if there are family members with the same problem.
- The doctor will also inquire about recent illnesses, surgeries, weight loss, or new medications that may influence hair loss.

- During the consultation, the doctor will examine the scalp to identify the pattern of loss and see if there is redness or scaling around the hair follicles.
- They may perform a pull test, which consists of gently pulling a small group of hairs to see how many come loose.
- To observe more closely, the doctor may use a lighted magnifying glass (trichoscope), which allows for the detection of thinner hairs mixed with normal hairs, an increase in very fine hairs, and small yellow dots that correspond to follicles without hair.
- In some cases, the doctor may request blood tests to rule out other causes of alopecia.
- If doubts persist, a small sample of scalp skin (biopsy) can be taken to be analyzed under a microscope and confirm the diagnosis.

These steps help to differentiate androgenetic alopecia from other types of hair loss and to choose the most appropriate treatment.

7. How is androgenetic alopecia treated?

Use dermatological lotions or foams applied to the scalp, take medications that stimulate growth and prevent loss, or undergo procedures, as long as they are prescribed by the treating physician.

8. Is it possible to prevent androgenetic alopecia?

Because this disease is associated with genetic factors, there is no exact measure to avoid androgenetic alopecia; therefore, it is important to consult in time to be able to make an early diagnosis and receive timely treatment to obtain better results.

Recommended reading

- Dermatology - 5th Edition, Asociación Colombiana de Dermatología y Cirugía Dermatológica

