Alopecia

What is alopecia?

Alopecia is the medical term for hair loss. It refers to any type of hair loss, thinning hair, or baldness in any region of the body. However, it more commonly affects the scalp. Alopecia can be temporary, slowly progressive, or be permanent (with scarring).

Who gets alopecia?

Alopecia can occur in men and women and can happen at any age.

What causes alopecia?

There are many causes of alopecia, and they can be divided into different categories:

Hair conditions

Some of the more common hair conditions that lead to hair loss include:

Hereditary alopecia: Pattern baldness (also known as androgenic/androgenetic alopecia) is the most common cause of hair loss. It is a type of hair loss that may run in families. It is also

associated with the male sex hormones (known as androgens), and increasing age, and can occur in men and women. Male pattern baldness causes about 95% of cases of hair loss in men, and is typically seen as a receding hairline, often with bald patches on top of the head. Female pattern baldness is being recognized as an increasing problem, but typically has a different pattern-hair thinning occurs all over the head in women (with a widening of the frontal 'part' width), but without frontal hairline recession.

- **Telogen effluvium:** This is a common cause of progressive thinning of all areas of the scalp due to a number of causes including medications, systemic disease, infection, stress, and often experienced postpartum.
- Alopecia areata: This is thought to be an autoimmune disease in which the body attacks its own hair, causing distinct round patches of hair loss anywhere on the body (most common pattern), irregular patches (less common), or even diffuse abrupt balding (rare).
- Cicatricial (scarring) alopecia: This is a rare condition in which hair follicles are destroyed, leading to scarring. Hair cannot regrow in the scarred areas. This can be caused by lupus erythematosus or lichen planus involving the scalp. The most common form, central centrifugal cicatricial alopecia (CCCA), is seen predominantly in African-American women, whose use of chemical relaxers may play a role.

Traumatic alopecia: This is due to either excessive pulling of one's own hair (trichotillomania) or after tight tension on hairs (traction alopecia) often as a result of certain hairstyles (such as braiding).

Other conditions

- General medical conditions: Many diseases can cause hair loss. These include anemia, thyroid disease, protein deficiency, and low vitamin levels.
- **Ringworm:** Ringworm of the scalp can cause patches of hair loss. This is a contagious disease caused by a fungal infection, and is common in children.
 - Medical treatments: Many medical treatments cause hair loss. These include radiation therapy, as well as various medicines, including chemotherapy drugs, contraceptive pills, anti-depressants, beta-blockers, immunosuppressive drugs, and even some over-the-counter medicines or supplements.

Other causes

Hair loss can occur due to a variety of other reasons, including:

- Dieting or poor nutrition
- Hormonal changes (such as after giving birth or during menopause)
- Poor hair care (such as excessive use of chemical treatments, or high heat during styling)

How is alopecia diagnosed?

A healthcare professional will use various methods when making a diagnosis of alopecia and trying to determine its cause. He or she will:

- Ask the patient many questions about the hair loss, other medical conditions, diet, medications, and other things that may be going on in the pateint's life.
- Examine the scalp and hair to examine the pattern of hair loss and look for changes to the scalp.

The healthcare professional also may:

- Remove a few hairs to examine under a microscope.
- Take a scraping of the scalp to check for fungal infection.
- Take blood samples, to check the levels of certain nutrients and hormones, and to rule out conditions such as anemia, or liver or kidney disease.



Alopecia can occur as a normal

part of aging and is not life

threatening, however, it can

cause a lot of emotional distress

for many patients.





Alopecia



Take a biopsy of the scalp and send the specimen to a dermatopathologist, a physician who specializes in examining skin biopsies and diagnosing skin and hair disease.

How is alopecia diagnosed at the lab?

A physician will remove all or part of the suspicious tissue and send it to a pathology lab. There the tissue is prepared on glass slides and reviewed by a pathologist, a healthcare professional who has specialized in the diagnosis of disease. At Inform Diagnostics, all of the pathologists have further specialized in their specific field of practice, such as dermatopathology for skin conditions.

The pathologist looks for abnormal cellular changes under a microscope. He or she interprets the findings under the microscope in the context of the clinical information provided by the healthcare provider. Some cases require additional special analysis to evaluate proteins, RNA and/or DNA.

At Inform Diagnostics, difficult and unusual cases are reviewed together by our specialists at large multi-headed microscopes to ensure the most accurate and definitive diagnoses.

The pathologist creates a pathology report with all of the important findings, including critical information to help guide treatment and assess prognosis, which is sent back to the healthcare provider.

How is alopecia treated?

Treatment will depend on the cause of hair loss. For example, patients with alopecia areata may need corticosteroids to try to stop the inflammation that damages hair follicles, while those with ringworm will need an anti-fungal medication to treat the infection.

Many treatments are available for pattern baldness, and a healthcare professional may recommend one or more of them:

Over-the-counter (OTC) treatments

Minoxidil (topical solution): This is the only OTC hair-regrowth product approved for men and women. It is typically used twice daily on the scalp to stop hair getting thinner, and to help hair regrowth. If it is successful, it usually takes several months for hair to regrow. And it must be used continually, or hair will begin to fall out again after the patient stops using it. Men typically use a 5% concentration of minoxidil, while women use a 2% solution.

Laser devices: Light therapy using small laser devices such as combs, brushes, or other devices may also help hair regrowth in some people.

Prescription treatments

Finasteride (oral pill): This can slow down hair loss and cause hair regrowth in many men. Women of child-bearing age should not take, or even handle, these pills, especially if they are pregnant.

Procedures

Various invasive procedures are also available to help hair regrowth, including:

- Hair transplantation
- Scalp reduction
- Scalp expansion
- Scalp flaps

A healthcare professional may recommend one or more of these procedures, depending on how much hair has been lost.

If a patient is concerned about hair loss or thinning, seek help immediately, especially because many of the causes can be stopped or treated. It is important to see a healthcare professional as soon as possible before too much hair is lost, because this increases the chances of having more hair in the future.

Learn more!

www.aad.org/dermatology-a-to-z/diseases-and-treatments/e---h/ hair-loss

www.nlm.nih.gov/medlineplus/ency/article/003246.htm

www.webmd.com/skin-problems-and-treatments/hair-loss/

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