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## **Facts About Hair Loss**

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**Your Life Your Health**

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Everyone experiences some hair loss every day. In fact, it is normal to lose up to 100 hairs a day. However, for many people, hair loss becomes excessive. Excessive hair loss can be caused by factors such as heredity, disease, injury, or old age, all of which affect the normal growth cycle of hair.

The most common type of hair loss is androgenetic alopecia, which involves thinning hair or balding of the scalp. Alopecia means hair loss. Androgenetic alopecia is caused by heredity (a characteristic passed down from parents to children) and may also be called male-pattern baldness or female-pattern baldness. In men with androgenetic alopecia, hair loss occurs in a typical pattern on the forehead area and on top of the head. In women with androgenetic alopecia, hair loss occurs throughout the scalp with overall thinning of hair. This condition occurs when a hormone that affects the sheaths surrounding the root of each hair (hair follicles) causes the follicles to sprout hairs that are thinner than normal. The hairs become progressively thinner and thinner, and eventually the follicles wither away and no hair grows at all. Androgenetic alopecia often begins between the ages of 12 and 40 in men and women. About half of the population is affected by some hair loss by the age of 50. In men, hair thinning is likely to continue until parts of the scalp are bald. Treatment may slow hair loss or cover bald areas, but it is not always effective.

Other, less common types of hair loss can cause hair shedding (when clumps of hair fall out) or hair thinning. These types of hair loss may be caused by an illness (such as alopecia areata, trichotillomania, traction alopecia, and telogen effluvium).

Although hair loss does not affect a person's physical health, it can be upsetting and affect a person's well-being and self-esteem. Also, hair loss can be a symptom of poor physical health or a disease condition.

Many people seek treatment for hair loss, and there are several different types of treatment, which vary in effectiveness. Examples of treatment include taking medication to reduce hair loss, wearing a hairpiece, or having hair transplant surgery to cover bald areas. Research on medications that promote hair growth is ongoing, and more effective medications may become available soon.

### **Common causes of hair loss**

The most common causes of hair loss include:

- Heredity. This is the process that causes the biological similarity between parents and children. If your parents were affected by hair loss, it is likely that you will be affected by hair loss as well.
- Certain diseases that do not affect the whole body. Diseases such as ringworm of the scalp (tinea capitis), which is common in children, can cause hair loss.
- Age. As people age, their hairs tend to break easier and hair follicles are not as productive. Many people have some hair loss by the age of 50.
- Stress. Mental stress (such as anxiety) or physical stress (such as surgery) can cause hair loss.
- Hair care. Chemical treatments can damage hair. Rough combing or brushing and hairstyles that are tight and pull on hair can cause hair loss.

### **Other causes of hair loss**

Other causes of hair loss include:

- Certain diseases that affect the whole body. These include thyroid disease, lupus, severe infection, or severe flu.
- Inadequate protein in the diet. Lack of protein in the body can alter the hair growth cycle and cause hair to shed after a couple of months. This can be reversed quickly by adding adequate protein to the diet.
- Injury to the scalp can damage hair follicles and cause hair loss.
- Medications. Some medications may cause hair loss (which is usually temporary). These medications include those used for arthritis, depression, heart problems, or blood thinners. Some cancer treatments can also cause hair loss.
- Changes in hormone levels. Childbirth, taking birth control pills, or changes in a woman's menstrual cycle can affect the hair growth cycle and cause hair loss.

### **Symptoms**

Hair loss can occur as hair thinning, without hairs noticeably falling out, or as hair shedding, with clumps of hair falling out.

Hair shedding, with clumps of hair falling out, may be a symptom of a disease or disorder that causes hairs to break or to pull out at the sheath that surrounds the root of a hair (follicle). The pattern of other types of hair loss (such as alopecia areata, trichotillomania, and traction alopecia) usually occurs in distinct patches, and less commonly as overall thinning (such as telogen effluvium).

Hair shedding, with clumps of hair falling out, often occurs suddenly or is noticed suddenly. Because it is often caused by a disease or disorder, hair loss can be stopped if the cause can be diagnosed and treated. In these cases, hair loss is reversible (hair grows back).

Whatever the cause, hair loss can be upsetting and can affect a person's self-esteem. Some people seek treatment for hair loss, even though treatments are not always effective in reducing hair loss or covering bald areas.

## **What Increases Your Risk for Hair Loss?**

Factors that increase the risk of hair loss include:

- Heredity. If one or both of your parents are affected by hair loss, it is likely that you will be affected as well.
- Disease or illness. Certain diseases or an illness can cause hair loss. The diseases may include ringworm of the scalp (tinea capitis), thyroid disease, or lupus. The illness may include a severe infection, high fever, or lack of protein.
- Age. Many people have some hair loss by the age of 50.
- Medications. Certain medications can cause hair loss.
- Hair care and styling. Hair care or styles can damage hair and cause hair loss.

## **When to Call a Doctor?**

Call your doctor if:

- Your hair loss is sudden, rather than gradual.
- You notice hair shedding in large amounts after combing or brushing, or if your hair becomes thinner or falls out.
- You are concerned that a medication may be causing your hair loss.
- You have a rash, scaliness, or any change in the skin on your scalp with hair loss.
- Signs of bacterial infection develop on your scalp, such as:
  1. Increased pain.
  2. Swelling, redness, tenderness, or heat.
  3. Red streaks extending from the area.
  4. Discharge of pus.
  5. Fever of 100°F (37.78°C) or higher with no other cause.
  6. The infection appears to be spreading.
- Your hair is gradually thinning and balding and you want to discuss treatment options with your doctor.

## **Watchful Waiting**

Most hair loss is caused by heredity. Hair loss caused by heredity is usually gradual and similar to the pattern of hair loss seen in your parents or siblings. However, some hair loss, especially hair shedding (with clumps of hair falling out), may be caused by a disease. If hair loss is a sign of a disease, it is important to get treatment for that disease.

## **Who to See**

The following health professionals can provide advice and treatment on hair loss:

- Family practice doctor
- Specialist in internal medicine (internist)
- Specialist in skin and hair problems (dermatologist)

To determine the cause of your hair loss, your doctor may ask you about:

- Characteristics of your hair loss. Is your hair thinning, with your scalp becoming more visible, but your hair is not noticeably falling out? Or is your hair shedding, with lots of hair falling out?
- How long your hair loss has been occurring. How long has it been since you had your normal amount of hair?
- Your family history of hair loss. Does your mother or father, brother or sister, or any other relative have hair loss? If so, what pattern of hair loss?
- Your hairstyling habits. Has your hair become fragile from pulling it too tight or from other hairstyling habits? Have you had any chemical treatments to your hair, such as perms or bleaching? Do you use a blow-dryer that may be too hot?
- Any recent illness. Have you had any skin rashes, such as ringworm, recently?
- Medications you are taking. Are you taking blood thinners or medications for arthritis, depression, or heart problems? Have you had any cancer treatment?
- Your diet. Are you getting enough protein in your diet?

Your doctor will also do a physical exam to look at the pattern of your hair loss. Hair loss caused by heredity usually has one of two distinct patterns. One pattern affects specific areas of the scalp (forehead area and top of the head), with normal amounts of hair on other areas of the scalp. The other pattern is a uniform thinning of hair throughout the scalp.

If the diagnosis of your hair loss is unclear, tests may be done. Testing includes analysis of the pattern of hair loss, number of hairs, or gently pulling the hair to see how much hair is shedding. Samples of your hair or scalp may be taken for lab analysis (for example, to detect the presence of a fungal infection). Your doctor may want to remove a small sample of scalp tissue so it can be examined under the microscope (scalp biopsy). General blood tests may be done to identify a disease, such as thyroid disease, that may be causing your hair loss.

Hair loss in men is easier to diagnosis than it is in women because of the distinct pattern and because other conditions do not cause the same symptoms. Hair loss in women is more difficult to diagnosis because the pattern is not as distinct as it is in men and because there are other conditions that could cause the same symptoms. However, for a woman with mild to moderate hair thinning who is otherwise healthy (with normal menstrual cycles and fertility history), testing to diagnosis hair loss usually is not done.

The main types of treatment for hair loss caused by heredity include:

- Medication. Medications may prevent hair loss and promote hair growth.
- Surgery. Surgery may be used to transplant hair or to move areas of the scalp with hair so that they cover bald areas.
- Hairpieces. Hairpieces may be worn to cover bald spots.

Treatment for hair loss may be very important to a person in terms of self-esteem and overall well-being. And while hair loss does not affect a person's health, the treatment may. (For example, medications may have harmful side effects, or surgery may include certain risks.)

## **Prevention**

Some types of hair loss can be prevented. Hair loss that is caused by an illness, medication, stress, diet, or hairstyling may be prevented. Treating an illness, changing a medication, reducing stress, eating adequate protein, and using hairstyles that do not pull on the hair may reduce or prevent hair loss.

Androgenic alopecia which is the most common type of hair loss is caused by heredity and cannot be prevented. Certain types of treatment, such as medications used to treat hair loss, may be effective in reducing or preventing hair loss.

## **Medications**

Medications, including spray, lotion, or pills, are available to treat the most common type of hair loss (androgenetic alopecia). These forms of medication can slow further thinning of hair and increase coverage of the scalp by enlarging existing hairs. However, these medications need to be taken continuously. If the medications are stopped, any hair that has grown in will gradually be lost, and within 6 to 12 months the scalp will most likely appear the same as before treatment.

Medications to treat hair loss work best on young people (in their 20s and 30s) whose hair loss is recent (within 5 years) and occurs on the top of the head rather than on the forehead. It may take 6 months of treatment before any results are seen from hair loss medications.