

ANDROGENETIC ALOPECIA (FEMALE PATTERN HAIR LOSS)

The most common type of hair loss seen in women is androgenetic alopecia, also known as female pattern alopecia or baldness. This is seen as hair thinning predominantly over the top and sides of the head. It affects approximately one-third of all susceptible women, but is most commonly seen after menopause, although it may begin as early as puberty. Normal hair fall is approximately 100-125 hairs per day. Fortunately, these hairs are replaced. True hair loss occurs when lost hairs are not regrown or when the daily hair shed exceeds 125 hairs. Genetically, hair loss can come from either parent's side of the family.

There are two different types of hair loss, medically known as anagen effluvium and Telogen effluvium. Anagen effluvium is generally due to internally administered medications, such as chemotherapy agents, that poison the growing hair follicle. Telogen effluvium, is due to an increased number of hair follicles entering the resting stage. The most common causes of telogen effluvium are:

Physical stress: surgery, illness, anemia, rapid weight change.

Emotional stress: mental illness, death of a family member.

Thyroid abnormalities.

Medications: High doses of Vitamin A -- Blood pressure medications- - Gout medications.

Hormonal causes: pregnancy, birth control pills, menopause.

When the above causes of telogen effluvium are reversed or altered you should see the return of normal hair growth.

DIET CONSIDERATIONS

Hair loss may also occur due to dieting. Franchised diet programs which are designed or administered under the direction of a physician with prescribed meals, dietary supplements and vitamin ingestion have become popular. Sometimes the client is told that vitamins are a necessary part of the program to prevent hair loss associated with dieting. From a dermatologists's standpoint, however, the vitamins cannot prevent hair loss associated with rapid, significant weight loss. Furthermore, many of these supplements are high in vitamin A which can magnify the hair loss.

PHYSICAL AND EMOTIONAL STRESS

Surgeries, severe illnesses and emotional stress can cause hair loss. The body simply shuts down production of hair during periods of stress since it is not necessary for survival and instead devotes its energies toward repairing vital body structures. In many cases there is a three month delay between the actual event and the onset of hair loss. Furthermore, there may be another three month delay prior to the return of noticeable hair regrowth. This then means that the total hair loss and regrowth cycle can last 6 months or possibly longer when induced by physical or emotional stress. There are some health conditions which may go undetected that can contribute to hair loss. These include anemia or low blood count and thyroid abnormalities. Both of these conditions can be detected by a simple, inexpensive blood test.

HORMONAL CONSIDERATIONS

Hormonal changes are a common cause of female hair loss. Many women do not realize that hair loss can occur after pregnancy or following discontinuation of birth control pills. It is important to remember that the hair loss may be delayed by three months following the hormonal change and another three months will be required for new growth to be fully achieved.

MYTHS RELATED TO HAIR LOSS

- Frequent shampooing contributes to hair loss.
- Hats and wigs cause hair loss.
- 100 strokes of the hair brush daily will create healthier hair.
- Permanent hair loss is caused by perms, colors and other cosmetic treatments.
- Women are expected to develop significant hair loss if they are healthy.
- Shaving one's head will cause the hair to grow back thicker.
- Standing on one's head will cause increased circulation and thereby stimulate hair growth !
- Dandruff causes permanent hair loss.
- There are cosmetic products that will cause the hair to grow thicker and faster.
- Stress causes permanent hair loss.
- Hair loss does not occur in the late teens or early twenties.
- Hair loss affects only intellectuals.
- There is a cure for androgenetic Alopecia.

These are only a few of the common myths heard by physicians and other hair loss specialists on a daily basis. The AHLC suggests that you first have your hair loss diagnosed by a competent dermatologist who sees hair loss patients on a regular basis. Once you know the diagnosis you will have a better understanding of exactly which treatment option may be best for you.

hair follicles remain alive below the skin surface, and the possibility of hair regrowth remains.

What is the signal that triggers the condition to start or stop?

It's not clearly known, but evidence is mounting that an immunological signal is involved. Modern immunological research is showing alopecia areata is probably an autoimmune disorder, one in which the body forms antibodies against some part of the hair follicle (a type of "self-allergy"). In those with alopecia areata, other antibodies directed against other normal parts of the body are also sometimes present, even though there is no disease or disability associated with these other antibodies.

Is alopecia areata hereditary?

Heredity sometimes plays a role. In one out of five persons with alopecia areata, someone else in the family has also had it. Alopecia areata often occurs in families whose members have had asthma, hay fever, atopic eczema, or other autoimmune conditions such as thyroid disease, vitiligo, early-onset diabetes, rheumatoid arthritis, lupus erythematosus, pernicious anemia, or Addison's disease.

What other parts of the body are affected?

In some, the nails may develop stippling that looks as if a pin had made tiny dents in rows across the nail. In a few, the nail changes are extensive. However, other than the hair and occasionally the nails, no other part of the body is affected.

How will it affect my daily life?

In a physical sense, alopecia areata is not disabling at all; persons with alopecia areata are usually in excellent physical health. In an emotional sense, it can be challenging, especially for those with extensive hair loss. One of the main purposes of the National Alopecia Areata Foundation is to reach out to individuals and families with alopecia areata and help them live full, productive lives. There are thousands of successful, well-adjusted, contented people living with this condition. The emotional pain of alopecia areata can be overcome with one's own inner resources, sound medical facts, and the support of

others. Sometimes professional counselling from a psychiatrist, psychologist, or social worker is needed to develop one's self-confidence and good self-image.

Does the hair ever grow back?

Yes, the hair definitely can grow back, and in some cases it can fall out again.

Is alopecia areata due to nerves?

No, alopecia areata is not a nervous disorder, and those who have it have not caused it and have no control over its course.

Is it necessary to change plans regarding school, sports, friends, career, dating, and marriage?

No, not at all.

What treatments are available?

There are several treatments available; the choice depends mainly on age and the extent of hair loss. Alopecia areata occurs in two forms: a *mild, patchy form* where less than 50% of scalp hair is lost, and an *extensive form* where greater than 50% of scalp hair or all the scalp hair is lost. These two forms of alopecia areata behave quite differently, and the choice of treatment depends on which form is present. Current treatments do not turn alopecia areata off; they prod the sluggish follicle to produce normal hair again, and they all need to be continued until the condition turns itself off, which may take months or years.

For mild, patchy alopecia areata...

Cortisone injections. For mild, patchy alopecia areata, the commonest treatment in this country is the *injection of cortisone* into the bare patches. The injections are usually given by a dermatologist who uses a tiny needle to give multiple injections into the skin in and around the bare patches. The injections are repeated once a month. Both the needle prick and the slight tingling are usually well tolerated by most people, and there is no discomfort after leaving the doctor's office. New hair growth is usually visible four weeks later. Treatment, however, does not prevent new patches from developing.

There are few side effects from local cortisone injections. Occasionally, temporary depressions in the skin result from the local injections, but these "dells" usually fill in by themselves.

Anthralin cream or ointment. Another treatment for mild, patchy alopecia areata is the *application of anthralin cream or ointment*. Anthralin is a synthetic, tar-like substance that has been used widely for psoriasis. Anthralin is applied as a cream or ointment to the bare patches once daily and washed off after a short time, usually 30 to 60 minutes. New hair growth is often seen in eight to twelve weeks. Anthralin can be irritating to the skin and cause temporary, brownish discoloration of the treated skin. By using short treatment times, skin irritation and skin staining are reduced without decreasing effectiveness. Care must be taken not to get anthralin in the eyes, and hands must be washed after applying it.

Topical minoxidil. *Topical minoxidil* is the newest treatment for alopecia areata. It is discussed later.

For extensive alopecia areata, or alopecia totalis/alopecia universalis...

Wigs. For extensive alopecia areata, or alopecia totalis/alopecia universalis, treatment is more difficult. There is no simple, sure solution, and for this reason an attractive wig is often the best alternative. There are many ways to make a wig look completely natural, and every wig has to be cut, thinned, and styled, often several times, until it is just right. To keep a wig from falling off, even during active sports, special double-sided sticky tape can be purchased in beauty supply outlets and fastened to the inside of the wig. There are also suction caps to which any wig can be attached, or there are entire suction cap units.

Cortisone pills. *Cortisone pills* are sometimes given for extensive scalp hair loss or when the condition is rapidly spreading. Cortisone taken internally is much more powerful than local injections of cortisone into the skin. It's necessary to discuss possible side effects of cortisone pills with your physician. Healthy, young adults often tolerate cortisone pills well and with few side effects. In general, however, cortisone pills are used in relatively