Alopecia Areata, Autoimmune Hair Loss

Alopecia areata is a self-destructing (*autoimmune*) disease that results in the loss of hair. In this condition your body's immune system attacks the hair *follicle*. The hair follicle is responsible for growing hair. Hair loss can occur on the scalp and other parts of the body. It usually starts as one or more small, round, smooth patches of hair loss. It occurs in males and females of all ages and races, but usually starts before age 30. The scalp is the most commonly affected area, but the beard or any hair-bearing site can be affected. This type of hair loss does not leave scars where the hair was lost.

Many people with alopecia areata only have a few patches of hair loss. In others, extensive patchy hair loss occurs. In a few people, all scalp hair is lost (*alopecia totalis*), or hair is lost from the entire scalp and body (*alopecia universalis*). No matter how widespread the hair loss, the hair follicles remain alive and are ready to resume normal hair production whenever they receive the correct signal. Hair re-growth may occur without treatment and can even restart after years of hair loss.

CAUSES

It is thought that something triggers the immune system to stop hair growth. It is not always known what the cause is. Some people have genetic markers that can increase the chance of developing alopecia areata. Alopecia areata often occurs in families whose members have had:

- Asthma.
- Hay fever.
- Atopic eczema.
- Some autoimmune diseases may also be a trigger, such as:
  - Thyroid disease.
  - Diabetes.
  - Rheumatoid arthritis.
  - Lupus erythematosus.
  - Vitiligo.
  - Pernicious anemia.
  - Addison's disease.

OTHER SYMPTOMS

In some people, the nail beds may develop rows of tiny dents (*stippling*) or the nail beds can become distorted. Other than the hair and nail beds, no other body part is affected.

PROGNOSIS

Alopecia areata is not medically disabling. People with alopecia areata are usually in excellent health. Hair loss can be emotionally difficult. The National Alopecia Areata Foundation has resources available to help individuals and families with alopecia areata. Their goal is to help people with the condition live full, productive lives. There are many successful, well-adjusted, contented people living with Alopecia areata. Alopecia areata can be overcome with:

- A positive self image.
- Sound medical facts.
- The support of others, such as:
  - Sometimes professional counseling is helpful to develop one's self-confidence and positive self-image.

TREATMENT

There is no cure for alopecia areata. There are several available treatments. Treatments are most effective in milder cases. No treatment is effective for everyone. Choice of treatment depends mainly on a person's age and the extent of their hair loss.
Alopecia areata occurs in two forms:

- A mild patchy form where less than 50 percent of scalp hair is lost.
- An extensive form where greater than 50 percent of 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 can stimulate the hair follicle to produce hair.

Some medications used to treat mild cases include:

- **Cortisone injections**. The most common treatment is the injection of cortisone into the bare skin patches. The injections are usually given by a caregiver specializing in skin issues (*dermatologist*). This caregiver will use a tiny needle to give multiple injections into the skin in and around the bare patches. The injections are repeated once a month. If new hair growth occurs, it is usually visible within 4 weeks. Treatment does not prevent new patches of hair loss from developing. There are few side effects from local cortisone injections. Occasionally, temporary dents (*depressions*) in the skin result from the local injections, but these dents can fill in by themselves.
- **Topical minoxidil**. Five percent topical minoxidil solution applied twice daily may grow hair in alopecia areata. Scalp, eyebrows, and beard hair may respond. If scalp hair re-grows completely, treatment can be stopped. Response may improve if topical cortisone cream is applied 30 minutes after the minoxidil. Topical minoxidil is safe, easy to use, and does not lower blood pressure in persons with normal blood pressure. Minoxidil can lead to unwanted facial hair growth in some people.
- **Anthralin cream or ointment**. Another treatment is the application of anthralin cream or ointment. Anthralin is a tar-like substance that has been used widely for psoriasis. Anthralin is applied to the bare patches once daily. It is washed off after a short time, usually 30 to 60 minutes later. If new hair growth occurs, it is seen in 8 to 12 weeks. Anthralin can be irritating to the skin. It can 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.

Some of the medications used for more extensive cases where there is greater than 50% hair loss include:

- **Cortisone pills**. Cortisone pills are sometimes given for extensive scalp hair loss. Cortisone taken internally is much stronger than local injections of cortisone into the skin. It is necessary to discuss possible side effects of cortisone pills with your caregiver. In general, however, cortisone pills are used in relatively few patients with alopecia areata due to health risks from prolonged use. Also, hair that has grown is likely to fall out when the cortisone pills are stopped.
- **Topical minoxidil**. See previous explanation under mild, patchy alopecia areata. However, Minoxidil is not effective in total loss of scalp hair (*alopecia totalis*).
- **Topical immunotherapy**. Another method of treating alopecia areata or alopecia totalis/universalis involves producing an allergic rash or allergic contact dermatitis. Chemicals such as diphencyprone (DPCP) or squaric acid dibutyl ester (SADBE) are applied to the scalp to produce an allergic rash which resembles poison oak or ivy. Approximately 40% of patients treated with topical immunotherapy will re-grow scalp hair after about 6 months of treatment. Those who do successfully re-grow scalp hair will need to continue treatment to maintain hair re-growth.
- **Wigs.** For extensive hair loss, a wig can be an important option for some people. Proper attention will make a quality wig look completely natural. A wig will need to be cut, thinned, and styled. To keep a net base wig from falling off, special double-sided tape can be purchased in beauty supply outlets and fastened to the inside of the wig.
  - For those with completely bare heads, there are suction caps to which any wig can be attached. There are also entire suction cap wig units. These state-of-the-art wigs which make use of a silicon base to create a secure, vacuum-fit, are comfortable and easily removed by the wearer. Proper fit of a vacuum wig requires that any existing scalp hair be shaved. These wigs can be more expensive than other types of wigs.

For more information contact the National Alopecia Areata Foundation at:
NAAF

PO Box 150760
San Rafael, CA 94915-0760
Phone: 415.472.3780
Fax: 415.472.5343
www.naaf.org
E-mail: info@naaf.org

Most of this information courtesy of the National Alopecia Areata Foundation (NAAF).

Document Released: 07/22/2005 Document Re-Released: 03/14/2011
ExitCare® Patient Information ©2011 ExitCare, LLC.