CONDITION

Alopecia cicatrisata

Learn about alopecia cicatrisata, also called scarring alopecia, including symptoms, causes, diagnosis, treatment, and when to seek medical care.

WHAT IT IS
Scarring disorders that destroy hair follicles

BODY SYSTEM
Skin and hair

MAIN SYMPTOMS
Permanent hair loss, itching, burning, scalp tenderness

WHAT CAUSES IT
Immune inflammation, infection, injury, often unknown

HOW IT IS DIAGNOSED
Scalp biopsy

MAIN TREATMENT
Anti-inflammatory and immune-modifying medicines

CAN IT BE CURED?
No, destroyed follicles cannot regrow

IS IT AN EMERGENCY?
Sometimes, fever with spreading scalp redness

LONG-TERM OUTLOOK
Permanent hair loss, but treatment may stop progression

Overview

Alopecia cicatrisata is an older term for cicatricial alopecia , also called scarring alopecia . It describes a group of disorders that damage hair follicles and replace them with scar tissue. Once a follicle has been destroyed, it usually cannot grow hair again.

Scarring alopecia can affect the scalp or other hair-bearing skin. It may develop slowly over several years or progress over a shorter period. Some forms cause noticeable itching, tenderness, burning, redness, scaling, or spots filled with pus. Other forms cause few symptoms until permanent hair loss becomes visible.

Doctors divide scarring alopecia into two broad categories. In primary scarring alopecia , inflammation directly targets the hair follicle. Examples include lichen planopilaris, frontal fibrosing alopecia, central centrifugal cicatricial alopecia, folliculitis decalvans, and dissecting

cellulitis of the scalp.

In secondary scarring alopecia , follicles are destroyed as part of a different injury or disease. Possible causes include severe burns, radiation, certain infections, skin cancer, trauma, and inflammatory skin diseases such as cutaneous lupus.

The condition matters because early inflammation may continue to damage nearby follicles. Treatment cannot usually restore follicles that have already been replaced by scar tissue, but it may slow or stop additional loss. Identifying the exact type of scarring alopecia is important because treatments differ.

Symptoms

The main symptom is permanent hair loss in one or more areas. The pattern depends on the underlying condition. Hair loss may begin at the crown, along the front hairline, in scattered patches, or around existing tufts of hair.

Affected skin may look smooth, pale, shiny, or scar-like. The tiny openings where hairs normally emerge, called follicular openings , may be reduced or absent. These changes help distinguish scarring alopecia from many forms of nonscarring hair loss.

Signs of active inflammation can include:

Symptoms do not always show how active the condition is. A person may have little discomfort even while hair loss is progressing. In other cases, itching or tenderness may continue after visible inflammation has improved.

Hair loss elsewhere on the body, nail changes, mouth sores, facial rash, joint symptoms, or unusual sensitivity to sunlight may point to a broader inflammatory condition. These features should be discussed with a clinician, but they do not by themselves establish a diagnosis.

- Itching, burning, pain, or scalp tenderness
- Redness or darker discoloration around individual hairs
- Scale or crust surrounding the hair shafts
- Small bumps, pustules, or areas of drainage
- Several hairs emerging together in a tuft
- Increased shedding or broken hairs at the edge of a patch
- A receding front hairline or loss of eyebrow hair

Causes and risk factors

Primary scarring alopecia develops when inflammation damages the part of the follicle that contains stem cells needed for future hair growth. Why this immune reaction begins is often unknown. It is not usually caused by poor hygiene, and most forms are not contagious.

Doctors classify primary scarring alopecias partly by the type of inflammatory cell seen under a microscope. Lymphocytic forms include lichen planopilaris, frontal fibrosing alopecia, central centrifugal cicatricial alopecia, and chronic cutaneous lupus. Neutrophilic forms include folliculitis decalvans and dissecting cellulitis. Some conditions have a mixed pattern.

Risk factors vary by subtype. Central centrifugal cicatricial alopecia occurs most often in women of African ancestry and can run in families. Hair practices that create repeated pulling, high heat, burns, or chemical injury may worsen scalp damage, although they do not fully explain every case.

Frontal fibrosing alopecia most often affects women after menopause, but it can occur before menopause and in men. Lichen planopilaris may occur at any adult age. Folliculitis decalvans has been linked to an abnormal inflammatory response involving scalp bacteria, but it is not simply an ordinary scalp infection.

Secondary scarring may follow a deep bacterial or fungal infection, a burn, radiation treatment, significant trauma, or prolonged tight hairstyles. Long-standing traction alopecia caused by repeated pulling can become permanent if follicles are damaged. Certain autoimmune diseases and skin cancers can also scar the scalp.

Having a risk factor does not mean that a person will develop scarring alopecia. Many people have no clear trigger, and routine activities such as ordinary shampooing do not cause the disorder.

Diagnosis

A dermatologist usually diagnoses scarring alopecia by reviewing the pattern of hair loss, symptoms, medical history, hair-care practices, and medicines. The scalp and other affected areas are examined closely.

The clinician may use a handheld magnifying device called a dermoscope or trichoscope . This can show loss of follicular openings, redness, scale, broken hairs, or characteristic changes around follicles that are difficult to see with the unaided eye.

A scalp biopsy is often needed. After numbing the area, the clinician removes one or two small samples of skin, usually from an active edge rather than the smooth center of an old patch. A pathologist examines the samples under a microscope to identify inflammation and scarring.

Choosing the right biopsy site can improve the chance of a useful result.

Other tests depend on the findings. Hairs, skin scrapings, or drainage may be tested when a fungal or bacterial infection is possible. Blood tests may be appropriate if symptoms suggest lupus, thyroid disease, nutritional deficiency, or another medical condition. There is no single blood test that confirms all forms of scarring alopecia.

Photographs and measurements can document the hairline or affected patches over time. Because progression may be subtle, this comparison can help determine whether treatment is controlling the condition.

Treatment and management

Treatment has two main goals: reduce active inflammation and prevent further permanent hair loss. It generally cannot make hair grow from follicles that have already been destroyed. The treatment plan depends on the exact diagnosis, how active and widespread it is, other health conditions, and the person's preferences.

For limited inflammatory disease, clinicians may use corticosteroid medicines applied to the scalp or injected into affected areas. These medicines reduce inflammation. Other anti-inflammatory creams or scalp preparations may be considered, particularly when long-term corticosteroid exposure is a concern.

More widespread or progressive disease may require an oral medicine. Depending on the subtype, options can include anti-inflammatory tetracycline antibiotics, hydroxychloroquine, or medicines that modify the immune response. Some of these treatments take several months to show whether they are helping. They may require blood tests, eye examinations, or other monitoring.

Neutrophilic conditions such as folliculitis decalvans may be treated with antimicrobial and anti-inflammatory approaches. If testing identifies a fungal infection, an antifungal medicine is needed. Treatment for an infection is different from treatment for an autoimmune form, which is one reason an accurate diagnosis matters.

Minoxidil may sometimes be used to support growth from follicles that remain alive, especially when a person also has pattern hair loss. It does not reverse established scar tissue or replace treatment for active inflammation.

Gentle scalp and hair care can reduce additional injury. A clinician may advise avoiding styles that pull tightly, painful braiding, excessive heat, harsh chemical processing, or scratching inflamed skin. These steps do not replace medical treatment when inflammation is active.

Cosmetic options include hair fibers, scarves, wigs, hairpieces, and changes in hairstyle. Hair

transplantation or scalp surgery may be considered for selected people after the condition has remained inactive for a sustained period. Surgery performed while inflammation is active may lead to loss of transplanted hair or further scarring.

Hair loss can affect self-image, relationships, and emotional well-being. Counseling, peer support, or discussion with a mental health professional may be useful when distress is persistent or interferes with daily life.

Complications

The main complication is permanent and sometimes expanding hair loss. Scarring can become more difficult to conceal when patches join together or involve the hairline, eyebrows, or a large part of the scalp.

Ongoing inflammation may cause chronic itching, burning, tenderness, crusting, or drainage. Scratching can further irritate the skin. Some neutrophilic forms can produce painful nodules, tunnels beneath the skin, or recurrent bacterial infection.

Treatment can also have unwanted effects. These vary greatly by medicine and may include skin thinning from repeated corticosteroid exposure, stomach upset, sensitivity to sunlight, infection risk, or changes found on laboratory tests. Clinicians balance these risks against the risk of continued permanent hair loss and arrange monitoring when needed.

Emotional effects are also important. People may experience embarrassment, anxiety, low mood, or social withdrawal. These concerns deserve the same attention as physical symptoms.

Follow up

Scarring alopecia usually requires routine follow-up with a dermatologist. Visits may include symptom review, scalp examination, photographs, hairline measurements, and laboratory monitoring. Follow-up frequency depends on disease activity and the treatment being used.

Contact the treating clinician sooner if hair loss is clearly expanding, symptoms return after improving, or a medicine causes new concerns. New pustules, drainage, increasing pain, or spreading redness should also be assessed promptly because infection may need treatment.

Seek urgent medical care for rapidly worsening painful swelling, fever with spreading scalp redness, or swelling around the eyes or face. Emergency help is appropriate for difficulty breathing, fainting, or swelling of the lips, tongue, or throat after taking a medicine. These reactions are uncommon but require immediate care.

Stable, symptom-free areas generally do not require emergency evaluation. Even so, routine monitoring remains useful because early activity can be subtle.

Sources

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