Pediatric Alopecia Areata

NATIONWIDE CHILDREN'S
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Alopecia Areata

Alopecia areata is a non-scarring form of hair loss occurring in children and adults. It is considered an autoimmune condition that results in hair follicle inflammation and loss of hair. While hair is lost most commonly on the scalp, hair anywhere on the body may be affected. Alopecia areata does not cause any systemic problems, though other autoimmune conditions and psychiatric sequelae may be involved in any given patient.

Alopecia areata frequently presents as the sudden onset of smooth, round and hairless patches on the scalp. The affected areas are usually skin-colored but may have a subtle peach tint. Occasionally, there are scattered, short pigmented or white hairs within the hairless patch. Inflammation (redness) or scaling is not visible on the surface of the skin.

Evaluating Alopecia Areata

Children usually first present with one to several small patches on the scalp, but occasionally present with more rapid hair loss involving nearly the entire scalp, eyebrows, eyelashes and body hair. The nails may show small pits in the surface.

In half of patients with alopecia areata, individual episodes of hair loss last less than one year and hair is spontaneously regrown. These patients may experience recurrent episodes of hair loss that spontaneously regrow or respond quickly to treatments.

Other patients have a progressive course with more stubborn disease that does not spontaneously remit and is refractory to multiple treatments. Unfortunately, there are currently no means to predict which patients will have limited and brief involvement and which patients will have extensive hair loss of a longer duration.

Who is at Risk

Alopecia areata has two peaks of onset – one in childhood and one in adulthood – though it has been reported in all ages. As with other autoimmune conditions, there is likely a genetic predisposition to alopecia areata with unknown triggers that result in manifestation of the condition.

Associated conditions in the patient or family that might represent increased risk include Type 1 diabetes, celiac disease, rheumatoid arthritis, vitiligo, thyroid disease, multiple sclerosis and inflammatory bowel disease.

Practice Management

Some alopecic patches will spontaneously regrow hair without treatment. Most patients and families, however, are interested in trying treatment to accelerate hair regrowth. Selection of treatment depends on the age of the patient, extent and duration of hair loss and comorbidities.

Treatment	Description
Topical corticosteroids	Potent (class I) steroids may be applied 1-2 times daily to scalp lesions, while weaker steroids (class VI or VII) should be used for the eyebrows. Atrophy may occur with prolonged use of strong steroids, so these patients should be seen at regular intervals (every 6-8 weeks).
Intralesional corticosteroids	Injection of steroids to the scalp is usually not tolerated until adolescence but can be a very effective treatment to induce regrowth. Topical numbing cream may be applied prior to injections. May be repeated every 4-6 weeks.
Topical minoxidil	This is often helpful as an adjunctive treatment when hair starts to regrow but should not be used as monotherapy.
Topical irritants (anthralin) and immunotherapy (squaric acid or diphenylcyclopropenone)	These are agents that induce an irritant or allergic contact dermatitis to the scalp which results in regrowth of hair. Because these are more tedious treatments with often bothersome side effects, they are typically reserved for patients who have failed other treatments and have more extensive loss of hair.
Systemic immunosuppressants	Various systemic agents, including steroids and steroid-sparing agents, have been tried for more widespread and recalcitrant alopecia areata with varying success. Even when a treatment is successful, the relapse rate is often high.

Initial Laboratory Evaluation

For more extensive and long-standing alopecia areata, blood work to check for associated conditions may be indicated. It is important to remember that blood work tests for comorbidities, not for a cause of the alopecia areata.

Tests to consider ordering include:

- Complete blood count
- Complete metabolic panel
- Thyroid studies – TSH, free T4, thyroid peroxidase antibodies, antithyroglobulin antibodies
- 25-OH Vitamin D
- Tissue transglutaminase IgA

NOTE: Aside from medical treatments, it is important to acknowledge the significant psychosocial burden that often accompanies alopecia areata. Supplying the patient with resources about support groups, educational information for schools and products to mask hair loss can be as important as treating the hair loss itself. Visit The National Alopecia Areata Foundation at ***naaf.org*** *for more information.*

When to Refer

Patients with classic, focal alopecia areata that is treatment-responsive can be managed by their primary care physicians.

Reasons to consider a referral to the **Pediatric Hair Disorders Clinic** at Nationwide Children's include:

- Uncertainty about the diagnosis
- Sudden, extensive new-onset or rapidly progressing alopecia areata
- Alopecia areata that does not respond to topical treatment with lesions lasting more than 1 year

The **Pediatric Hair Disorders Clinic** provides specialized care for children experiencing hair loss and hair growth disorders. The clinic is available to patients suffering from hair loss, hair shaft disorders and excessive hair growth. Diagnostic and treatment options available include: scalp biopsy, trichogram, intralesional injections, topical immunotherapy, systemic immunosuppressants and serial photography.

Patients and families can expect a comprehensive evaluation that is patient-centered, with visits aimed at determining diagnoses and establishing personalized treatment plans.

Referrals and Consultations

Online: **NationwideChildrens.org**

Phone: **(614) 722-6200** or **(877) 722-6220** | Fax: **(614) 722-4000**

Physician Direct Connect Line for 24-hour urgent physician consultations:

(614) 355-0221 or **(877) 355-0221**