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## Clinical Pearls

*Clinical Pearls help prepare residents for the future by providing them with top tips from experts about what they should know about specific, key subject areas by the time they complete their residency.*

# Alopecia areata

Maria Hordinsky, MD, FAAD

**1. Alopecia areata (AA) is a chronic or episodic, immune-mediated disorder which affects all ages, ethnicities, and genders.** With an estimated prevalence of approximately one in 1,000 people and a lifetime risk of approximately 2%, AA is associated with loss of hair follicle immune privilege and a T-cell-mediated immune attack on cells within the hair bulb. This loss of immune privilege is believed to lead to activation of natural killer cells, secretion of interferon (IFN)-gamma that stimulates the expression of major histocompatibility complex class I polypeptide-related sequence and interleukin (IL)-15. IL-15 influences regulatory T-cells and promotes proliferation of both T- and natural killer cells.

**2. There is currently no treatment approved by the Food and Drug Administration for managing AA but there are still treatment options to choose from.** Prior to prescribing a treatment, the clinic visit should include a thorough medical history, review of hair/scalp care habits, and patient/family goals and expectations. The examination should focus on documenting any changes in all hair-bearing areas as well as any nail involvement. Disease activity can be ascertained with light hair pull tests. Treatment selection is based on patient age, hair loss location, disease extent, activity and presence or absence of any comorbidities. Stable patchy AA is commonly treated with topical or intralesional (3-10 mg/cc) corticosteroids, 2% or 5% topical minoxidil when fine vellus or indeterminate hair growth is present, topical immunotherapy or combinations such as a topical steroid with topical minoxidil. For those with extensive or recalcitrant disease, oral immunosuppressive agents may be prescribed and in patients with acute hair loss, systemic corticosteroids may be indicated.

**3. Patients and family members frequently ask if AA is inherited.** The risks for parents, siblings, and children of patients has been estimated to be 7.8%, 7.1%, and 5.7%, respectively. Familial and twin studies further support a genetic predisposition to AA, and genome-wide association studies have confirmed associations of AA with HLA genes and susceptibility loci associated with other autoimmune diseases.

**4. Adults and children with AA should receive psychosocial well-being evaluations.** It is best to proactively manage parental anxiety, frustration, and guilt as well as any patient anxiety or depression. The National Alopecia Areata Foundation is a useful resource for patients.

**5. Alopecia areata patients are aware of evolving research with Janus kinase (JAK) inhibitors.** Therefore, a conversation about evolving therapies in clinical trials and off-label use of oral and topical JAK inhibitors such as tofacitinib and ruxolitinib may be expected.

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