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Education



Case Study

21 YEAR OLD LADY WITH ALOPECIA



Case History

Miss J, 21 years, otherwise in good health has been worried of late. She has been losing hair on her scalp and visits her dermatologist.



On examination there is a circumscribed area of hair loss consistent with alopecia areata.

1. What is alopecia areata?

Alopecia areata is a recurrent nonscarring type of hair loss that can affect any hair-bearing area. The condition usually is localized when it first appears. Extreme variations in duration and extent of the disease occur from patient to patient

2. Patients with alopecia have

- a) Single patch
- b) 2 patches
- c) Multiple patches
- d) Any of the above**

80% have only a single patch, about 10% have 2 patches, and 5-10% have multiple patches



3. Alopecia areata affects

- a) Scalp
- b) Beard
- c) Eyebrows
- d) All of the above**

Alopecia areata most often affects the scalp; however, it can affect any hair-bearing area. The beard eyebrows and extremities can also be affected. More than one area can be affected at once.

4. What are the types of alopecia?

- Localized alopecia areata: Episodes of localized (<50% involvement) patchy alopecia areata usually are self-limited; spontaneous regrowth occurs in most patients within a few months, with or without treatment
- Extensive alopecia areata: Extensive (>50% involvement) forms of alopecia areata are less common

Alopecia areata can be classified according to its pattern.

- Localised- Hair loss most often is localized and patchy
- Reticular pattern occurs when hair loss is more extensive and the patches coalesce.
- An ophiasis pattern occurs when the hair loss is localized to the sides and lower back of the scalp
- Saisipho (ophiasis spelled backwards) pattern occurs when hair loss spares the sides and back of the head
- Alopecia totalis occurs with 100% hair loss on the scalp
- Alopecia universalis occurs with complete loss of hair on all hair-bearing areas



Case contd.

Mrs. J was given intra lesional triamcinolone injection which was repeated after 4 weeks. She responded well to treatment.

5. What are the different treatments available for alopecia?

Therapies most commonly include corticosteroid injections, corticosteroid creams, minoxidil, anthralin, topical immunotherapy, and phototherapy. The choice of one agent over the others depends on patient age (children do not always tolerate adverse effects), extent of condition (localized vs extensive), and the patient's personal preference

6. What is the role of intralesional corticosteroids in the treatment of alopecia areata?

- Intralesional steroids are the first-line treatment in localized conditions
- Hair growth may persist for 6-9 months after a single injection.
- Injections are administered intradermally using a 3-mL syringe and a 30-gauge needle
- Triamcinolone acetonide is used most commonly; concentrations vary from 2.5-10 mg/mL. The lowest concentration is used on the face. A concentration of 5 mg/mL is usually sufficient on the scalp
- Less than 0.1 mL is injected per site, and injections are spread out to cover the affected areas
- Adverse effects mostly include pain during injection and minimal transient atrophy
- The presence of atrophy should prompt a reduction in the triamcinolone acetonide concentration and avoidance of the atrophic site
- Injections are administered every 4-6 weeks



7. What other treatments are available for alopecia?

- Topical steroids are useful, especially in children who cannot tolerate injections. Fluocinolone acetonide cream 0.2% Betamethasone dipropionate cream 0.05% , clobetasol propionate under occlusion can be used. Treatment must be continued for a minimum of 3 months before regrowth can be expected, and maintenance therapy often is necessary. The most common adverse effect is local folliculitis
- Immunotherapy- Commonly used agents for immunotherapy include squaric acid dibutylester (SADBE) and diphencyprone (DPCP)
- Anthralin- The mechanism of action of anthralin is unknown. Most likely, it creates inflammation by generating free radicals, which have antiproliferative and immunosuppressive actions
- Minoxidil is useful in the treatment of alopecia areata in patients with extensive disease. The 5% solution is used. No more than 25 drops are applied twice per day regardless of the extent of the affected area. Initial regrowth can be seen within 12 weeks, but continued application is needed to achieve cosmetically acceptable regrowth. Minoxidil usually is well tolerated. Adverse effects include distant hypertrichosis and irritation
- Systemic treatments include Psoralen plus UV-A, prednisone and cyclosporine

References

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- Jason R. Swanson and Jeffrey L. Melton, Dermatology atlas
- Alopecia API Text book of medicine, 7th edition