Best Practice Guideline

I. Alopecia Areata

II. Diagnosis/Screening
- a. Primarily made clinically
  - i. Well-circumscribed patch(es) of non-scarring hair loss
  - ii. "Exclamation point" hairs (distal ends of hair are wider than proximal ends) at the borders of the lesions (characteristic)
  - iii. Regrowth of hairs are often fine, white, and/or gray
  - iv. Other forms:
    1. Alopecia totalis (AT)- total loss of all hair on the scalp
    2. Alopecia universalis (AU)- loss of all hair on body
    3. Ophiasis- band-like loss of hair across the periphery of the scalp
  - v. May see nail involvement: fine pitting of nail plates, punctate leukonychia, and rough nails (trachyonychia)
- b. Scalp biopsy
  - i. Peribulbar lymphocytes affecting the terminal anagen hairs like a "swarm of bees (characteristic)
  - ii. Decreased number of terminal anagen hairs
  - iii. Increased number of catagen-telogen hairs
  - iv. Miniaturized anagen follicles with bulbs in the mid dermis
- c. No laboratory tests are diagnostic
  - i. May be associated with autoimmune diseases, primarily thyroid disease. If suspicion or for long-standing/severe cases, obtain lab work
    1. ANA
    2. Rheumatoid factor
    3. TFTs
    4. Serum vitamin B12

III. Treatment
- a. Because condition is benign, treatment is optional
  - i. Limited hair loss typically will regrow hair within 1 year.
  - ii. There is no curative treatment available; recurrences can be frequent
  - iii. For support, patients may look into www.naaf.org
- b. May mask hair loss with hair pieces, hats, and/or scarves; makeup or tattooing for eyebrow hair loss
- c. Topical steroids
  - i. If limited mild alopecia or children
  - ii. Typically prescribe clobetasol propionate gel or solution BID. May also use under occlusion q 24 hrs at bedtime.
- d. Minoxidil
  - i. For patchy and extensive involvement (>50% scalp involvement); not effective for AT/AU
  - ii. Use minoxidil 5% solution BID
- e. Intralesional corticosteroid injections
  - i. If mild to moderate alopecia (<25% involvement)
  - ii. Use triamcinolone acetonide aqueous suspension 2.5-10mg/cc
  - iii. Injected intradermally in 0.05-0.1cc/injection not exceeding a total of 1-2cc per visit
  - iv. Space injections 0.5-1.0cm apart in a patch

v. Repeat every 4-8 weeks

f. Prostaglandins
    i. For loss of eyelashes
    ii. Bimatoprost 0.03% qd to eyelid margins

g. Anthralin
    i. Anthralin 1% cream qd for 15-20 min then increase time by 5 min (up to 1 hr) every week or until mild dermatitis develops

h. Topical immunotherapy
    i. Use diphencyprone or squaric acid dibutylester to induce an allergic contact dermatitis
    ii. Start with 2% lotion in small area (4cm) then dilute concentration and apply to areas gradually increasing dosage weekly (0.001%-2%) until mild dermatitis (goal: tolerable level of pruritus and erythema)

i. PUVA
    i. For severe disease; variable effectiveness
    ii. PUVA turbans- towels soaked in 0.0001% 8-methoxypsoralen and warmed up to 37^{o}C; wrap around scalp for 20 min. followed by UVA radtx

j. Excimer laser- 2x/week for 24 sessions

k. Systemic corticosteroids
    i. Oral prednisone 40mg tapered for 6 weeks, oral dexamethasone 5mg two consecutive days/week, or triamcinolone 40mg IM q month
    ii. May induce regrowth but hair loss recurs when discontinued

l. Systemic cyclosporine
    i. 5mg/kg/day alone or with low dose steroid
    ii. May induce regrowth but hair loss recurs when discontinued.

m. Methotrexate
    i. 15-20mg alone or with 20mg of prednisone q week
    ii. May induce regrowth but hair loss recurs when discontinued.

n. Sulfasalazine
    i. Gradually increase from 0.5g to 1.5g BID
    ii. May induce regrowth but hair loss recurs when discontinued.

IV. Surveillance/Indications for Consultation

a. If association with autoimmune disease, refer to rheumatology and/or pcp.
b. If psychological impact, refer to psychologist for management.

V. References

a. Mesinkovska, N.A. & Bergfeld, W.F. (2014). Alopecia areata: Diagnosis and treatment. *Journal of Dermatology for Physician Assistants, 8 (1),* 16-22.
b. Sperling, L.C., Sinclair, R.D., and Shabrawi-Caelen, L.E. (2012). *Alopecias*. In J.L. Bolognia, J.L. Jorizzo, & J.V. Schaffer (Eds.), *Dermatology* (pp.1100-1102). New York, NY: Elsevier.
c. Wolff, K., Johnson, R.A., & Saavedra, A.P. (2013). *Alopecia Areata*. In A.M. Sydor & K.J. Davis (Eds.), *Fitzpatrick's color atlas and synopsis of clinical dermatology* (pp. 767-770). New York, NY: McGraw Hill.