You’ve Got This: New Patient Hair Loss

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Conflict of Interest

• No relevant conflicts
• Investigator for Samumed, Kythera, Incyte, Concert, Allergan
• Advisory Board/Consultant: Samumed, Castle Biosciences, Proctor and Gamble
New Patient

• I am losing all my hair! Help me!
You’ve Got This!

• History and physical
• Laboratory work-up
• Biopsy
• Clues for specific diagnosis
Clinical Evaluation

• **History is paramount**
  • Complaint
    • Shedding, thinning, breaking, not growing
  • Onset
  • Associated Symptom
    • Itching, burning, scaling, pain
  • Hx of Prior Hair loss
  • Non-scalp (eyebrows, lashes, body hair)
  • Excess body/Facial Hair
Important Points in the History

- Women
  - Menstrual History
  - Contraceptive and HRT
  - Fertility
  - Recent pregnancy
  - Menopause
  - Acne/hirsutism

- Weight change & exercise habits
  - Crash diets, elimination diets
  - Weight loss surgery
  - Exercise type and frequency

- Psychological stress
  - Divorce, family deaths, job

- Illness:
  - Surgery
  - Fever, Hx of chronic disease, malignancy, infection, autoimmune, liver or renal disease

- Medications
  - Prescription
  - Herbals & OTCs

- Family History:
  - AGA – men or women
  - Alopecia areata
  - Autoimmune diseases (thyroid)
  - Estrogen-dependent cancers
Clinical Evaluation

• Hair grooming
  • Hair Type (long, medium, short, fine, course, wavy)
  • Hair Color
  • Hair Care
    • Frequency of coloring, blow-drying, relaxer, flat iron, comb, rollers, perm, extensions, wig, braids
Physical Exam

• Scalp
  • Erythema
  • Scale
  • Part Width
Physical Exam

• Scalp
  • Follicular papules
  • Pustules
  • Bald patches
  • Scar
Hair Breakage

- Periphery and central scalp
- Report hair ‘shedding’ or not growing
- One harsh perm with scalp burning
- Chronic use of perms
Physical Exam

• Nails

Hypothyroidism

Alopecia Areata
Wood’s light

- Highlight Malassezia
- Hypopigmentation

Frontal Fibrosing Alopecia

Seborrheic Dermatitis
Dermoscopy

Lichen planopilaris
Dermoscopy

Lichen Planopilaris

Alopecia areata


AGA

Tosti and Torres. Actas Derm 2009
Scalp Biopsy

• Two punch specimen
  • Vertical
  • Horizontal
• One punch specimen for DIF

P. Foliaceous

AGA – follicular miniaturization
Scalp Biopsy

Lichen Planopilaris

Frontal Fibrosing Alopecia
Scalp Biopsy
CCCA
Folliculitis decalvans (and other inflammatory alopecias)
Scalp Biopsy - ACD
Hair Mount
Scanning EM

Uncombable hair syndrome (pili trianguli et canaliculi)
Bacterial and Fungal Culture

- Pustules
- Scale
- Pain
- Drainage

Folliculitis Decalvans with staph colonization
Laboratory Evaluation

• General Health
  • CBC
  • CMP

• Nutritional
  • Ferritin
  • Zinc
  • Vitamin D

• Hormonal
  • TSH

• Others (as indicated)
  • Autoimmune - lupus
    • ANA
  • AA/LPP/FFA
    • MICROSONMAL AB
  • Androgen Excess
    • DHEAS
    • Testosterone (free & total)
    • SHBG
    • HgA1C
  • Vegetarian/heavy menses/anemia
    • Iron studies
Hair Disorders

• Non-scarring
  • Telogen effluvium (TE)
  • Female pattern hair loss (FPHL)
  • Male pattern hair loss (MPHL)
  • Alopecia areata (AA)

• Scarring
  • Lichen planopilaris (LPP)
  • Discoid lupus erythematosus (DLE)
  • Central centrifugal cicatricial alopecia (CCCA)
  • Folliculitis decalvans, DCS, folliculitis keloidalis
Telogen Effluvium

• Shedding in excess of the normal 10% on a daily basis
  • 200-500 hairs per day
• Numerous triggers (3-6 months prior to onset of hair loss)
• Non-scarring
• Can unmask androgenetic alopecia
Common Triggers

- **Stress**
  - Job
  - Divorce
  - Death in family
- **Medication**
  - Almost any
- **Post partum**
- **Surgeries**
  - Excessive blood loss
  - Prolonged anesthesia
- **Illness**
  - Fever
  - Prolonged recovery
- **Weight loss**
  - Extreme diets
  - Rapid
  - Weight loss surgery
- **Nutritional Deficiencies**
  - Iron
  - Vitamin D
  - Zinc
Androgenic Alopecia

• Follicular miniaturization - Hair follicles progressively smaller with each anagen cycle
• Anagen phase shortens
• Proportion of hairs in telogen increase (10->20%)
  • May note increased shedding
• Loss of follicles, replaced by fibrous tracts
• Process driven by:
  • Testosterone
  • Age
  • Genetics
Polycystic Ovary Syndrome

• ~10% of woman

• Variable definitions
  • Irregular menses
  • Infertility
  • Cysts on ovaries
  • Acne
  • Hirsutism
  • Metabolic syndrome
  • Acanthosis
Work-Up - PCOS

• Evaluate for androgen excess
  • DHEAS
  • Testosterone – free and total
  • Fasting blood glucose
  • HbA1C

• Others:
  • Sex hormone binding globin
  • Androstenedione
  • 24 hour urine cortisol
  • Prolactin

• Ovarian Ultrasound
  • Selective patients
Nota bene

• Diffuse, rapid onset is uncommon in AGA

• Should raise suspicion for:
  • Systemic illness:
    • Nutritional deficiency (iron, vitamin D, zinc)
    • Thyroid disease
    • Syphilis
    • Medication exposure
    • Malignancy (ovarian, elevated androgens)

• Autoimmune etiology
  • Lupus
  • Alopecia Areata – diffuse type
Diffuse Pattern Alopecia Areata

• Diffuse thinning
• Look for background patchiness
• Clues:
  • Loss of facial/body hair
  • Nail changes
  • Rapid onset
• Biopsy key to diagnosis
Lichen Planopilaris

- Uncommon lymphocytic scarring alopecia
- 2-8% of all visits to hair clinics
- 40% of scarring alopecias
- Pain, pruritus, burning
- Bright red erythema
Clinical Variants

• Classic LPP
• Frontal fibrosing alopecia
  • Scalp, face, body
• Graham-Little-Piccardi-Lassueur
  • Cicatricial alopecia
  • Lichen planus
  • Non-scarring loss of axillary and pubic hair
CCCA

• Central Centrifugal Cicatricial Alopecia (CCCA)
  • Scarring hair loss common in black women
  • Begins on vertex (top) of scalp
  • Very difficult to treat
  • Hair care (hot comb/relaxers/braids??)
Summary

- Work up
  - Thorough
  - Detailed
  - Directed
- Empathetic Approach
- Overlaps
Thank You

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