
 Penn Medicine
DERMATOLOGY
Established 1765

ODAC VIRTUAL PRE-CONFERENCE SYMPOSIUM

TWO CASES OF ALOPECIA

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DISCLOSURES

- I have no relevant financial disclosures



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Case 1

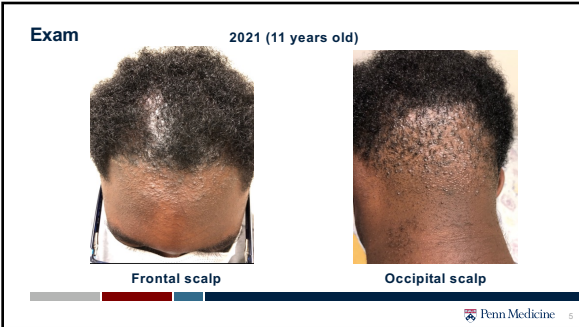


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Poll Question:
 Which of the following are you most concerned is the potential cause of this child's alopecia?
 (Choose one)

- A. Persistent dermatophyte infection
- B. Seborrheic dermatitis
- C. Scalp psoriasis
- D. Primary scarring alopecia
- E. Cutaneous rheumatological disease (lupus, sarcoidosis)

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History of Presenting Illness

- ▶ 11yo M presents with 5-year history of scalp flaking, itching, pustules/crusting, and hair loss
- ▶ No nail pitting, joint pain, eyebrow/eyelash/body hair loss
- ▶ **Past Medical/Surgical History/Medications/Allergies:** G6PD, otherwise none
- ▶ **Family History:** grandmother with 1 year of hair loss as a child, unknown type, self-resolved
- ▶ No improvement with oral terbinafine/ketoconazole shampoo (for presumed tinea capitis) or tacrolimus ointment (for presumed scalp psoriasis)
- ▶ Dermatophyte screens (fungal cultures) **negative** x3 (2016, 2017, 2021)
- ▶ Aerobic culture swab 2021, **MSSA positive** → mild improvement with 1 week of cephalexin
- ▶ Punch biopsy x2 performed (vertex, occipital scalp)

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Histopathology



DIAGNOSIS

A) Scalp, vertex: **LATE STAGE SCARRING ALOPECIA WITH FEATURES OF FOLLICULITIS DECALVANS, SEE NOTE**

B) Scalp, nuchal: **SCARRING ALOPECIA WITH FEATURES OF CCCA/FOLLICULITIS DECALVANS, SEE NOTE**

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Folliculitis Decalvans

- ▶ Neutrophilic primary scarring (cicatricial) alopecia
- ▶ Most commonly occurs in adults (middle aged men), but can occur in children
Imhof, Reese L., et al. "The spectrum of pediatric scarring alopecia: A retrospective review of 27 patients seen at Mayo Clinic." Pediatric Dermatology 38.3 (2021): 550-554.
- ▶ *Staphylococcus aureus* may have a role in pathogenesis but exact role is unclear
- ▶ Suggested by some to be an inflammatory variant of central centrifugal cicatricial alopecia (CCCA) based on shared histological findings and responses to treatment
Sperling, Leonard C., Alvin R. Solomon, and David A. Whiting. "A new look at scarring alopecia." Archives of Dermatology 138.3 (2002): 235-242.
- ▶ **Pathology**
 - Polytrichia, peri-/intra-follicular neutrophils, mixed acute and chronic inflammation, follicle destruction in upper dermis
- ▶ **Exam**
 - Pustules, scale, hair tufts, induration, erythema (may be hard to appreciate in deeper skin tones), follicular dropout
- ▶ **Treatment aimed at stopping inflammation and preventing progression**
 - Topical or intralesional corticosteroids, oral antibiotics, isotretinoin

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Clinical Course


Treated for 9 months (Aug 2021 – May 2022) with:

- ▶ Doxycycline (inconsistent adherence)
- ▶ Clobetasol (excellent adherence)
- ▶ Ketoconazole shampoo (excellent adherence)
- ▶ Intralesional Kenalog injections (5 mg/mL): every 2 months, a total of 4 rounds

In May 2022, appeared clinically stable (if not mildly improved)

- ▶ **STOP doxycycline for the summer**
- ▶ Start topical clindamycin
- ▶ Continue clobetasol, ketoconazole, and intralesional kenalog (2 additional rounds)

Returned to clinic in Sept 2022



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Exam

May 2022



➔

Sept 2022






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Exam


May 2022



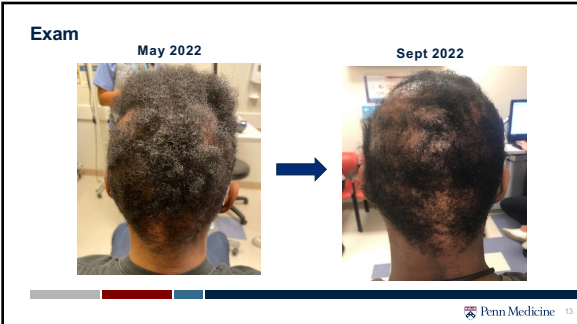
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Sept 2022

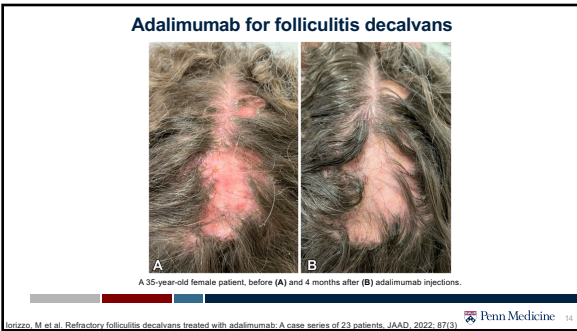




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Key Learning Points

- ▶ Primary scarring alopecia can occur in children and scalp biopsy is needed for an accurate diagnosis.
- ▶ The pathogenesis of folliculitis decalvans (FD) may involve an abnormal response to *Staph Aureus*
- ▶ FD may be an inflammatory form of central centrifugal cicatricial alopecia (CCCA)
- ▶ FD/CCCA can involve the occipital scalp, as well as the frontal/vertex scalp
- ▶ Systemic treatment is important for severe or extensive disease
 - Recalcitrant cases may benefit from adalimumab

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Case 2




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Exam





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Poll Question:
Which of the following is the most common cause of this type of alopecia?
(Choose one)

- A. Age
- B. Hormonal imbalance
- C. Hairstyles with tension
- D. Family history of hair thinning
- E. Vitamin or mineral deficiencies



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History of Presenting Illness

- ▶ 42yo F with eczema presents with 8-year history of hair loss
- ▶ Asymptomatic, no burning, itching, pain
- ▶ Hair practices include coloring every month, extensions (i.e. glue and sew-ins) to cover hair loss
- ▶ She frequently wears her hair in a ponytail
- ▶ No chemical relaxer or thermal styling use
- ▶ Past Medical/Surgical History: epilepsy
- ▶ Family History: hair thinning in multiple family members
- ▶ Medications/Allergies: noncontributory, no drug allergies

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Traction Alopecia

- ▶ Acquired form of hair loss due to frequent and prolonged mechanical tension on the hair strand and follicle
 - Associated haircare practices: tight ponytails, braids, buns, extensions, headwraps/coverings, pins, chemical relaxers
 - Commonly seen in women of African descent but can occur in persons of any race/ethnicity/gender
 - There are descriptions in the literature of traction alopecia in Sikh men and ballerina dancers
 - Kumar AJ, Kaur S, Basak P, Sharma R. Traction Alopecia in Sikh Males. Arch Dermatol. 1989;125(11):1587
 - Samrao A, Chen C, Zedek D, Price VH. Traction Alopecia in a Ballerina: Clinicopathologic Features. Arch Dermatol. 2010
- ▶ Starts as reversible traction folliculitis (perifollicular erythema, papules, or pustules) → hair thinning and miniaturization → irreversible scarring alopecia
- ▶ Pathology
 - Early: trichomalacia, increased telogen/catalagen, mild perifollicular chronic inflammation
 - Late: follicular miniaturization, loss of terminal hair follicles replaced with fibrous tracts; minimal inflammation
- ▶ Exam
 - Early: erythema, papules, pustules, scale; fringe sign, hair casts
 - Late: loss of follicular ostia, scarring, minimal inflammation
- ▶ Treatment aimed at preventing scarring
 - Topical or intralesional corticosteroids, oral antibiotics (if inflammatory), minoxidil (topical or oral), hair transplantation (end stage scarring)

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Marginal Traction Alopecia Severity (M-TAS) Score

Each area is demarcated by the distance between arrows as demonstrated. For each area enter 0 for a normal hair line, otherwise match it to one of the pictures below and enter the corresponding number in the table below.

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Low dose oral minoxidil (LDOM) for traction alopecia

Fig.1
Response of traction alopecia to oral minoxidil. A, Frontotemporal scalp prior to treatment. B, Frontotemporal scalp after 11 months of treatment with oral minoxidil.

Kim SR, Craiglow BG. Treatment of traction alopecia with oral minoxidil. JAAD Case Rep. 2022 Apr 1;23:112-113 Penn Medicine 25

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Clinical Course

- ▶ Patient offered and declined biopsy
- ▶ Diagnosed with androgenetic alopecia and traction alopecia
- ▶ Received intralesional Kenalog injections (5 mg/mL, 1 round) with mild improvement at 3 mos
- ▶ Counseled to stop wearing tight ponytails and avoid hair extensions
- ▶ Recommended topical minoxidil 5% foam daily (as of last clinic visit, patient had yet to start this)

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Key Learning Points

- ▶ Traction alopecia (TA) can occur in persons of any race, ethnicity, or gender
- ▶ TA can frequently occur with other types of hair loss; patients may be using hairstyles like extensions, braids, or wigs to camouflage hair thinning
- ▶ TA is biphasic; initially is reversible (non-scarring); over time becomes irreversible (scarring)
 - This can motivate patients to adhere to treatment and stop traumatic styling
- ▶ Consider low-dose oral minoxidil (LDOM) in patients who cannot tolerate topical minoxidil
- ▶ Hair transplantation is a viable treatment option for end-stage scarring TA

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