

An 8-Year-Old Boy with a Linear Lesion on the Nose

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An 8-year-old male presented for evaluation of a lesion across his nasal bridge. This had been worsening and getting more

prominent over the last 6 months. He frequently rubbed his nose with the palm of his hand due to rhinitis. His medical history was significant for asthma, allergic rhinitis, conjunctivitis, and resolved peanut allergy. He lived with his parents and was the youngest of five children. The boy's family history was significant for atopy in parents, and a sister with anaphy-

laxis to tree nuts. There was no family history of severe or scarring acne vulgaris. Review of systems was normal.

On physical exam, he was cooperative and well-appearing, with normal growth parameters. On the distal portion of his nose, linear clusters of firm white papules within a horizontal crease were found (see Figure 1). No other cutaneous abnormalities were found.

CME EDUCATIONAL OBJECTIVES

1. Recognize the transverse nasal crease and its association.
2. Identify treatment options for milia in the nasal crease.
3. Identify cutaneous findings associated with atopy in children.

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Figure 1. Linear white papules across the nose.

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Diagnosis:

Milia in the Transverse Allergic Crease

DISCUSSION

The allergic crease or nasal crease is a transverse line across the middle of the nose between the alar and triangular cartilages and is commonly seen in patients with allergic rhinitis. The groove can be permanent or transient and is often secondary to nose rubbing or “allergic salute” versus a congenital anatomic variant. Myers and colleagues¹ described 116 patients with a nasal crease, all of whom had a family or personal history of atopic disease. Overall, allergic rhinitis is extremely common with a reported prevalence of up to 40% in the pediatric population. Of note, approximately 7% of school children exhibit the transverse nasal crease.²

Milia in the nasal crease are most often seen in children with chronic allergic symptoms. These small, firm, white papules are often present for many months before medical evaluation is sought. The occurrence of transverse linear milia cysts over the dorsum of the nose in an 11-year-old girl with no atopic history was first described by Del-Rio and colleagues³ in 1993. Akinduro and Burge⁴ described a 7-year-old with atopy and a

nasal crease containing milia since birth. Children with allergic keratoconjunctivitis with frequent eye rubbing may also develop milia in a periocular distribution. Other cutaneous findings in atopic children are atopic pleats (accentuated lines or grooves under eyes also called Dennie-Morgan fold), allergic shiners, keratosis pilaris, dermatographism,

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mid-facial and circumoral pallor, lichen spinulosus, hyperlinear palms, and ichthyosis vulgaris.

Milia has been reported in multiple forms. Hyperpigmentation, hypopigmentation, atrophic scarring, distinct rows of milia, and cornified papules have all been described. The milia has been termed “pseudoacne.”⁵ This is distinct from acne vulgaris due to different pathogenesis and clinical course, which typically persists for months in pre-adolescent years, is limited to the nasal crease, and has no recurrence after removal or topical therapy.

Previous histologic evaluation of lesions in other case reports have revealed

foreign body giant-cell reactions, keratin granulomas, superficial epidermal cysts, and histologic resemblance to seborrheic keratosis.² Typically, there are not inflammatory cells. The etiology is felt to be invaginations of epidermal cells, secondary to repeated trauma at the crease.² The differential diagnosis includes acne vulgaris and benign adnexal tumors.⁵

Treatment of milia in the nasal crease is varied. Topical retinoids will likely be the most effective. Use of topical agents for inflammation such as benzoyl peroxide or topical antibiotics may be of limited success. Manual extraction is usually curative and recommended for large, persistent papules with failed medical management.⁵ The patient was treated with adapalene 0.3% gel nightly, resulting in a slow resolution of the lesions. ■

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