Clinical Image

White sponge nevus of cannon

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A 9-year-old girl presented with a single, well-defined, oval-shaped, whitish plaque of 2×1 cm over the ventral surface of the anterior two-thirds of the tongue (Fig. 1) for the past 4 years, which was rough on palpation, not removable on wiping with gauze and was associated with burning sensation during food intake. No other family members had similar complaints. Oral, topical steroids, and various antibiotics were tried resulting in no improvement. No other similar lesions were found in oral mucosa or anywhere else in the body. Lymph node examination was normal. Fine needle aspiration cytology from the lesion showed blood elements that were not significant. Histopathological examination showed parakeratosis, acanthosis, spongiosis, and koilocytosis (vacuolization of keratinocytes) with lymphocytic infiltration in the upper dermis. Based on the clinical and histopathological features, a diagnosis of white sponge nevus of cannon was made. Since the condition is benign, no treatment was required for the patient except reassurance and to rule out other benign and premalignant conditions, a biopsy was done.

White sponge nevus of cannon, a rare autosomal dominant condition characterized by dyskeratotic hyperplasia, can be detected at birth or in early childhood and prevalence is estimated to be about 1 in 2,00,000 [1]. It is associated with a mutation in cytokeratin 4 or 13 genes resulting in abnormal keratinization affecting the oral mucosa but can also involve labial, nasal, esophageal, and genital mucosa presenting as asymptomatic, thickened, white, velvety, diffuse plaques. The differential diagnosis includes oral candidiasis, lichen planus, leukoderma, pachyonychia congenita, dyskeratosis congenita, Darier's disease, and leukoplakia [2]. As this condition is benign and the patient did not have any cosmetical concerns, no treatment was required and the patient was reassured although penicillin antibiotics [3], topical tetracycline antibiotics in the form of mouthrinse, antihistamines, surgical removal, and laser ablation being various modes of treatment available.

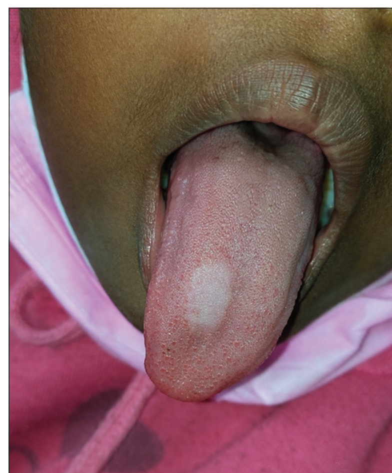

Figure 1: A single, well-defined, oval-shaped, whitish plaque of 2×1 cm over the ventral surface of anterior two-thirds of the tongue

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