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Unusual Presentation of Eruptive Vellus Hair Cysts

Introduction

Eruptive vellus hair cysts are a rare benign anomaly of hair follicle development. They are more common in children, adolescents, or young adults, affecting genders and ethnicities equally. They can be sporadic or inherited. Additionally, mutations in the gene encoding keratin have been described. Clinically, eruptive vellus hair cysts appear as eucrhomic or slightly hyperpigmented follicular papules measuring 1 to 4 mm in diameter with a central umbilicated surface, typically involving the chest, abdomen, and limbs. Facial involvement of eruptive vellus hair cysts is uncommon. Variants such as macular, papular, hyperpigmented, Ota-like nevus, and even unilateral have been described. Sites of involvement include the forehead, cheeks, and periorbital region. Clinical presentation often does not suffice for a definitive diagnosis, requiring histopathological examination, which reveals well-circumscribed cystic lesions in the mid-dermis and/or superficial dermis, containing variable amounts of lamellar keratin and numerous cut hairs. Differential diagnoses include acneiform eruptions, milia, folliculitis, with the most relevant being multiple steatocystoma which presents with significant clinical overlap and can only be distinguished by histopathological analysis. The treatment of this entity is challenging.

Case Report

A 44-year-old female patient presented with multiple asymptomatic eucrhomic papules on her face since the age of 14. She had received multiple acne treatments without response. Physical examination revealed numerous smooth papules measuring between 1 and 3 mm, eucrhomic, concentrated on the cheeks and auricular pavilions. There was no family history of similar lesions. A skin biopsy was performed for histopathological study, revealing a cyst in the mid-dermis with abundant lamellar keratin and several hairs within it, findings consistent with eruptive vellus hair cyst. Treatment with CO2 laser was performed, resulting in improvement of the aesthetic appearance of the lesions.

Comments

Eruptive vellus hair cysts are an unusual condition caused by an anomaly in hair follicle development. Although the main challenge lies in the diagnosis, therapy is challenging. The treatment of this condition is often challenging. Although spontaneous resolution of eruptive vellus hair cysts has been reported, therapeutic options include methods such as dermabrasion, excision of lesions, and ablative lasers. Topical lactic acid, oral retinoids, and urea creams have all been tried with varying degrees of success.