The Rare Appearance of Premature Sebaceous Hyperplasia: A Case Report

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Abstract

A Sebaceous hyperplasia is a rare disease which can be subcategorized based on the age of onset. The disease usually manifests itself in middle aged and elderly patients, so if observed earlier, it is defined as premature sebaceous hyperplasia. A 38-year-old male patient presented with papules and heterochromatic plaques on the face and neck that he informed us had first become apparent over 30 years. Physical examination revealed both papules and heterochromatic fused plaques, with depressed tops, that were predominately located on the face. Dermatopathology was suggestive of sebaceous gland hyperplasia. The combination of age of onset, clinical presentation and dermatopathology led us to diagnose precocious sebaceous hyperplasia. We report this case to draw attention to this rare condition to help avoid unnecessary investigations and therapeutic interventions.

Keywords: Premature sebaceous hyperplasia; Heterochromatic plaques; Pimples; Differential diagnosis.

Introduction

Sebaceous hyperplasia is a benign condition that can be divided into two types, premature sebaceous hyperplasia and senile sebaceous hyperplasia, depending on the age of the patient at onset. Premature sebaceous hyperplasia is rare and easily misdiagnosed at the point of initial examination. Patients have an early age of onset, mainly around puberty, and usually present with small (<10 mm) papules (which can be partially umbilicated), or in rare cases, fused and/or (papules >10 mm in diameter) linearly distributed plaques, etc., the disease needs to be differentiated from sebaceous nevus.

In this article, we detail a case of a large patchy, heterochromatic premature sebaceous hyperplasia, that occurred on the face of a patient.

Case presentation

A 38-year-old male patient presented to our office complaining of papules on the face, which we observed were also distributed over the neck. These lesions had been getting progressively worse over a period of 28 years, but without any other symptoms. On the right side of the face, we observed fused raised plaques which measured 4 cm and had well-defined borders. Whereas, on the left side of the face and neck we observed multiple papules which exhibited an umbilical concave top and measured 2-3 mm (Figure 1a-1b). There was no family history of any similar disease. The session presentation was biopsied and the results were suggestive of sebaceous gland hyperplasia (Figure 1c). The combination of clinical manifestations and pathology led to the diagnosis of Premature Sebaceous Hyperplasia (PSH). The right plaque lesion was excised in stages, and after one month, no recurrence was observed.
Discussion

PSH was first described by Dupre, in 1980 [1]. The disease has a genetic susceptibility and an autosomal dominant inheritance pattern [2]. It was once believed to be more prevalent in men. However, in more recent years, more female patients have been diagnosed with PSH, indicating that the disease is influenced by factors other than hormone levels. Currently, the definitive etiology and mechanism are unknown and more cases are required for clarification.

The average age of onset is between 12 and 26 years. However, congenital forms have also been reported in patients [3,4], with Oh et al., [3] classifying this condition as a misshapen tumour as opposed to PSH. There are also atypical presentations, such as linear PSH or PSH of fused plaques [5,6]. Our case is the third reported incidence of a patient presenting with a large, fused plaque that resembles a sebaceous nevus [3,4]. In addition, our patient noticed brown spots on the plaque, which is unusual. On the right facial and cervical papules, as well as the surrounding normal skin, no heterochromatic manifestation was observed. We consider this somehow due to the inhibition of keratin-forming cells. This is the first reported case. The histology is identical to that of senile sebaceous hyperplasia but is differentiated from sebaceous nevus.

PSH is characterized by a largely normal epidermis, with mature sebocytes clustered into clusters of sebaceous glandular lobules and ducts opening to the epidermis. Sebaceous nevus has mostly hyperplastic epidermis with papillary hyperplasia, dilated parietal sweat glands and no sebaceous ducts opening to the epidermis, in addition to possible sebaceous gland hyperplasia. PSH does not usually require treatment. However, if the papules appear on the face, some patients opt for removal for aesthetic reasons. Treatment options include surgical excision and oral treatment with isotretinoin. Claude first proposed isotretinoin for treating PSH in 1985. He prescribed 40 mg twice per day for 2 weeks, which resulted in the rash disappearing. However, he observed the lesions recurred 3 weeks after the treatment was discontinued [7]. As a result of this, Boonchai investigated a regimen of topical treatment, using 0.05% isotretinoin gel, and reported satisfactory results after discontinuation of the drug [2]. In future, larger studies are needed to demonstrate the potential benefits of using isotretinoin to treat PSH. Our patient refused treatment with isotretinoin for personal reasons, so we had to resort to surgical resecting.

In contrast to sebaceous nevi, PSH does not pose a risk of malignancy [8]. Despite this, an early diagnosis is necessary to avoid unnecessary interventions.

Declarations

Acknowledgement: We thank the patient for allowing us to take pictures and publish the treatment outcome.

Declaration of patient consent: The authors certify that they have obtained all appropriate patient consent.

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References

