

Case Report

Steatocystoma multiplex presenting as asymptomatic nodules on back

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Abstract Asymptomatic nodules of long duration on back are always a diagnostic dilemma. Steatocystoma multiplex is a rare condition, characterized by presence of multiple dermal cysts containing sebum and lined by the epithelium with sebaceous follicles. In the present case, nodules started on the upper back and gradually spread to involve shoulder and upper chest region. There was no history of any systemic complaints. Examination revealed multiple skin-colored nontender nodules. Histopathology from the nodule showed hyperkeratosis and follicular plugging. A large cyst lined by flattened squamous epithelium with atrophic sebaceous units was seen deep in the dermis.

Key words

Steatocystoma multiplex.

Introduction

Steatocystoma multiplex (*synonym* - hereditary epidermal polycystic disease, sebocystomatosis) is an epidermal polycystic disease, usually begins in late childhood and persists indefinitely. It also occurs as a solitary lesion called steatocystoma simplex, which has no hereditary tendency.¹

Case report

A 32-year-old male, agriculturist presented to skin opd with asymptomatic multiple nodules over back of 15 years duration. Nodules started over upper back, gradually spreading to involve whole back, shoulder and upper chest region. There was history of occasional pain and pus

discharge from the lesions. There was no history of similar lesions in other body areas like axilla and scrotum. He denied any systemic complaint and the family history was negative. Physical examination revealed multiple, skin-colored, soft to firm, 5 to 10mm non-tender nodules (**Figures 1**). Palms, soles, oral and genital mucosa were normal. Blood investigations like hemogram, liver function tests, fasting and post-prandial blood sugar, and renal function tests were within normal limits. His fasting lipid profile was normal.

Histopathology from a nodule showed epidermis with hyperkeratosis and follicular plugging. In lower dermis collection of multiple RBCs was seen. Deep to the dermis, large cyst lined by flattened squamous epithelium with atrophic sebaceous glands were seen in its wall (**Figures 2 and 3**).

Discussion

Steatocystoma multiplex is an autosomal dominant disorder; however, in some cases no familial pattern can be established.² It is a very

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Figure 1 Multiple skin-coloured nodules on back.

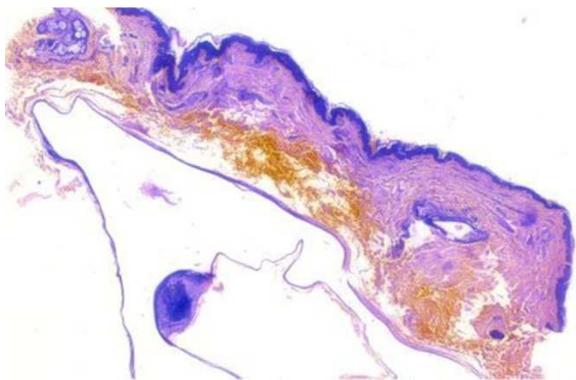


Figure 2 Histopathology of the nodule 5X.

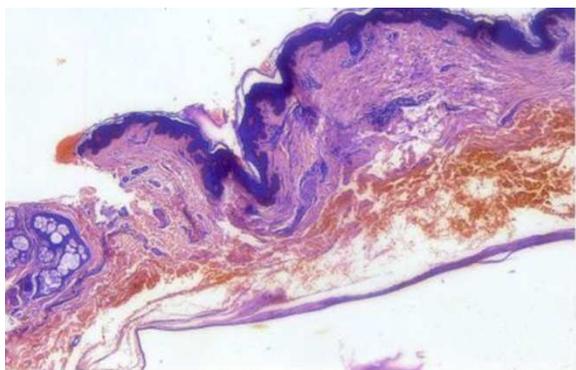


Figure 3 Histopathology of the nodule 10X.

uncommon condition, usually beginning in adolescence or early adult life with equal sex distribution.

Differentiation in the cyst wall of steatocystoma multiplex is, to a large extent, in the direction of sebaceous unit. The sebaceous duct and outer root sheath are composed of similar cells, but undulation and thinning of the horny layer and

existence of sebaceous cells in the cyst wall are characteristic features of the sebaceous gland. Sebaceous duct cells, like outer root sheath cells, contain abundant glycogen and amylophosphorylase, keratinize without the interposition of keratohyaline granules, and on electron microscopic examination, after keratinization retain their desmosomes.

Clinically, it is characterized by multiple smooth, firm, dermal cystic papules and nodules within the dermis, varying in diameter from a few millimeters to twenty millimeters or more. They usually appear or become larger at puberty. The trunk, scrotum, and the proximal part of the limbs are most commonly involved, particularly presternal area. No punctum is usually apparent over cyst. The deeper lesions are skin-colored and superficial lesions may have a yellowish color. When punctured, the cysts discharge a characteristic oily or creamy fluid. The lesions are usually asymptomatic, while some may become inflamed, suppurate, and heal with scarring. Familial clustering and congenital forms of steatocystoma multiplex have been reported.

Histopathology shows cyst in mid-dermis.³ The wall is lined by thick, homogenous, eosinophilic layer that protrudes irregularly into the lumen and composed of keratinizing epithelium. Characteristic feature in most lesions of steatocystoma is the presence of flattened sebaceous gland lobules either within or close to the cyst wall. In some cysts, invaginations resembling hair follicles extend from the cyst wall into the surrounding stroma, and in rare instances true hair shafts are seen, indicating that the invaginations represent the outer root sheath of hair. In few cysts, lanugo-sized cluster of hairs may be seen.

As in our case, the number of cysts makes excision impossible in most instances. There is no reason, apart from cosmetic, for treating them.⁴ Aspiration with a needle can reduce the size of the lesions and improvement can last many months.⁵ Suppurative cases of steatocystoma multiplex improve with isotretinoin therapy,⁶ although size and the number of lesions may not be reduced. Inflamed lesions may be excised or treated with incision and drainage and/or intralesional glucocorticoid.

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