

Single Case

Plaque-Type Syringoma: A Case Report

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Keywords

Adnexal tumor · Sweat glands · Syringoma

Abstract

Syringomas are benign appendageal tumors originated from eccrine ducts. The lesions usually present as multiple small, firm papules at lower eyelids and cheeks of women. Plaque-type syringoma is an infrequent form of syringoma and to date, 12 cases have been reported. Pathology demonstrated benign proliferation of eccrine ductal structures in the dermis with surrounding fibrotic stroma. We report the case of a 40-year-old Thai male with plaque-type syringomas at infraorbital areas.

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Introduction

Syringomas are benign adnexal tumors of eccrine origin, mostly found in young to middle-aged women. The lesions presented as multiple, small, yellowish or skin-colored papules, often less than 3 mm and usually at the periorbital area. Unusual primary morphologies of syringomas, including lichen planus-like, milium-like and plaque-type syringomas, have been observed with possible distinct pathophysiology. We herein report a case of plaque-type syringoma which is a rare form of syringoma and 12 cases have so far been reported.

Case Report

A 40-year-old Thai male from Bangkok came to the dermatology outpatient clinic with a history of multiple asymptomatic flesh-colored papules, which had slowly increased in number and coalesced into plaques, on both infraorbital regions, for 5 years. He denied a history of previous treatment. There was no other abnormal systemic symptom nor was there a family history of a similar skin condition.

Physical examination showed bilateral symmetrical ill-defined skin-colored plaques, 1.5–2 cm in diameter, with peripheral multiple 1–2 mm skin-colored papules on both infraorbital areas (Fig. 1). Hair and nails were normal with no mucosal involvement.

The histopathologic section from the left cheek revealed benign proliferation of eccrine ductal structures in the dermis with surrounding fibrotic stroma (Fig. 2, 3). No perineural invasion or nuclear atypia was seen. The diagnosis was plaque-type syringoma. As the lesion was benign, the patient decided to observe the lesion without any treatment.

Discussion

Syringomas are benign eccrine sweat gland tumors which present as multiple, small, yellowish or skin-colored papules, usually at the periorbital area; however, genitalia, trunk, scalp and acral sites have been reported [1–3]. Four clinical variants of syringomas have been proposed in 1987: localized, generalized, Down's syndrome-associated and familial form [4]. Uncommon types include lichen planus-like, milium-like and plaque-type syringomas. Plaque-type syringoma was first described in 1979 by Kikuchi et al. [6]; thereafter, 12 cases have been further reported on the face, neck, trunk, penis, and acral areas. More than half of the patients were female with unilateral distribution [5–10]. Histopathologic examination demonstrates collections of small tadpole-shaped tubular structures, lined by single or double row of cuboidal epithelial cells, in the upper dermis [3, 6]. Plaque-type syringomas should be differentiated histologically from desmoplastic trichoepithelioma (DTE), morpheaform basal cell carcinoma (BCC), and microcystic adnexal carcinoma (MAC) in order to prevent unnecessary and extensive surgical procedures [5, 7, 10]. MAC is difficult to differentiate from plaque-type syringoma. Adequate tissue sampling is very important. Ductal structures in MAC are lined by asymmetric single cells. Presentation of perineural invasion is seen in MAC. MAC usually involves the dermis, subcutis and sometimes muscle, cartilage, and bone, whereas plaque-type syringoma is mostly limited to the upper dermis [5, 7]. Only one report of plaque-type syringoma of the penis with involvement of the deep reticular dermis has been reported so far [9]. DTE and morpheaform BCC can be differentiated from plaque-type syringoma from the lack of ductal differentiation. DTE often contains Merkel cells which stain positive for cytokeratin-20 and morpheaform BCC has features of nuclear atypia and mitoses [5, 7]. The histopathologic section from our patient showed no features suggesting MAC, DTE or morpheaform BCC.

Treatments of syringomas are for cosmetic concern and remain challenging. CO₂ laser is the most effective treatment from current available data, but it does not give complete resolution. TCA peels could be used to combine with CO₂ laser to increase efficacy [2].

Statement of Ethics

Informed consent for publishing the case was obtained from the patient.

Disclosure Statement

The authors report no conflicts of interest. There was no funding of this work.

References

- 1 Patrizi A, Neri I, Marzaduri S, Varotti E, Passarini B: Syringoma: a review of twenty-nine cases. *Acta Derm Venereol* 1998;78:460–462.
- 2 Williams K, Shinkai K: Evaluation and management of the patient with multiple syringomas: a systematic review of the literature. *J Am Acad Dermatol* 2016;74:1234–1240.
- 3 Srivastava D, Taylor RS: Appendage tumors and hamartomas of the skin; in Goldsmith LA, Katz SI, Gilchrist BA, Paller AS, Leffell DJ, Wolff K (eds): *Fitzpatrick's Dermatology in General Medicine*, ed 8. New York, McGraw-Hill, 2012, pp 1337–1362.
- 4 Friedman SJ, Butler DF: Syringoma presenting as milia. *J Am Acad Dermatol* 1987;16:310–314.
- 5 Suwattée P, McClelland MC, Huiras EE, Warshaw EM, Lee PK, Kaye VN: Plaque-type syringoma: two cases misdiagnosed as microcystic adnexal carcinoma. *J Cutan Pathol* 2008;35:570–574.
- 6 Kikuchi I, Idemori M, Okazaki M: Plaque type syringoma. *J Dermatol* 1979;6:329–331.
- 7 Wallace JS, Bond JS, Seidel GD, Samie FH: An important mimicker: plaque-type syringoma mistakenly diagnosed as microcystic adnexal carcinoma. *Dermatol Surg* 2014;40:810–812.
- 8 Rongioletti F, Semino MT, Rebora A: Unilateral multiple plaque-like syringomas. *Br J Dermatol* 1996;135:623–625.
- 9 Mario M, Yevgeniy B, Janis T, Benjamin L: Plaque-like syringoma with involvement of deep reticular dermis 2014;71:e206–e207.
- 10 Christine S, Tammie F, Mary P: Plaque type syringoma mimicking a microcystic adnexal carcinoma. *J Am Acad Dermatol* 2016;74:AB287.

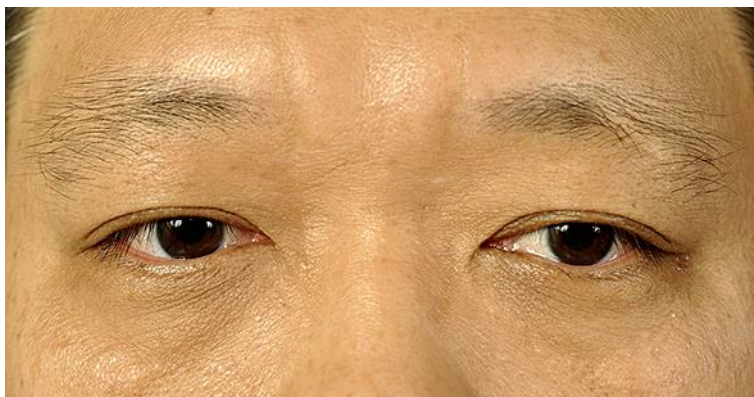


Fig. 1. Bilateral symmetrical ill-defined skin-colored plaques, 1.5–2 cm in diameter, with peripheral multiple 1- to 2-mm skin-colored papules on both infraorbital areas.

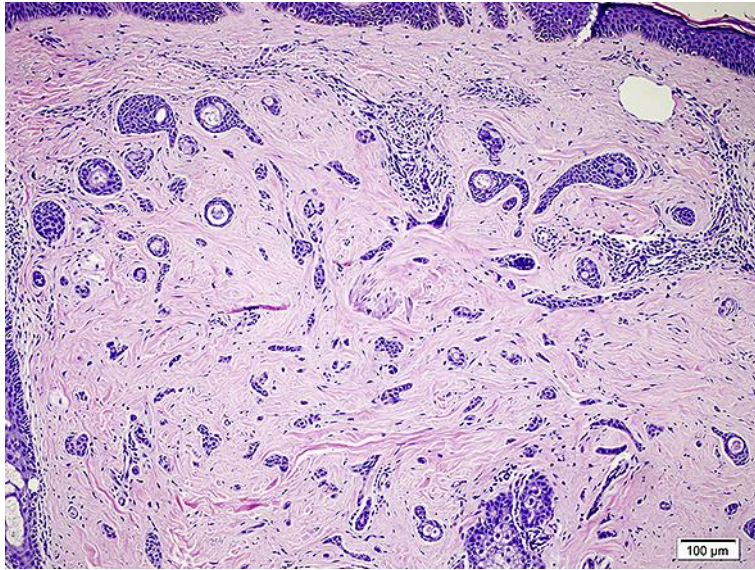


Fig. 2. Hematoxylin and eosin, $\times 10$. Proliferation of eccrine ductal structures in the dermis with surrounding fibrotic stroma.

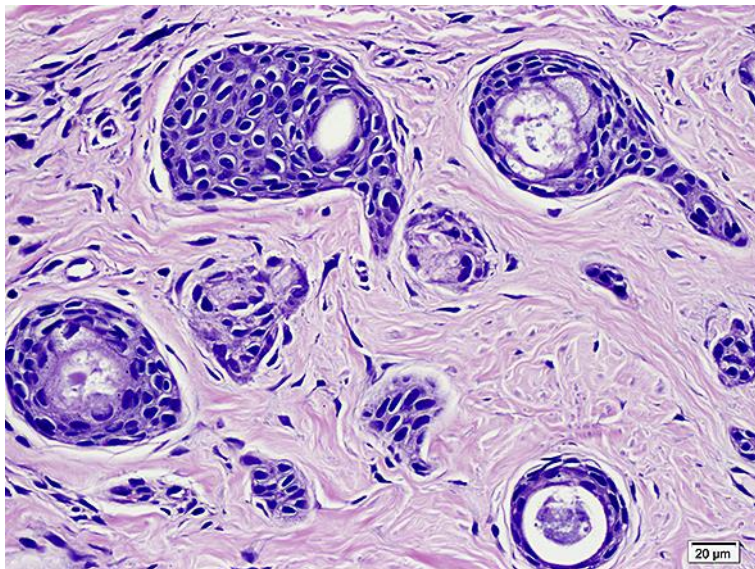


Fig. 3. Hematoxylin and eosin, $\times 40$. The wall of the ducts is lined by 2 rows of cuboidal cells with comma-like tails.