## Late-onset, Eruptive Syringoma in an Elderly Man: Correlation with Carbamazepine

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Syringomas are benign neoplasms of the eccrine sweat gland ducts that commonly appear around the eyelids in women. Clinically, they manifest as small, skin-coloured or slightly pigmented papules. Syringoma is classified into four clinical types: localized; familial; Down's syndrome associated; and generalized, which encompasses multiple and eruptive syringomas (1). Furthermore, clear cell syringoma, which is characterized by histological proliferation of clear cells, has been reported to be associated with diabetes mellitus (2). Eruptive syringoma is a rare variant and usually appears before or during puberty (3). The lesions occur in large numbers and in successive crops on the neck, chest, abdomen, maxillae and genitalia. We describe here a case of late-onset eruptive syringoma in a 69-year-old man and discuss its possible association with an anti-epileptic drug.

## CASE REPORT

A 69-year-old man was referred to our department for the evaluation of skin lesions, which he had first noticed at the age of approximately 60 years. The lesions had first appeared on his abdomen, and 3 years ago the lesions progressively spread to the chest, lateral part of the trunk, and thighs. There was no family history of similar eruptions. However, he had had a cerebral infarction at the age of 63 years and had therefore been taking carbamazepine for 4 years.

Dermatological examination revealed multiple brownish erythematous papules, 2–4 mm in diameter, distributed on the anterior and lateral sides of the trunk and on the upper thighs (Fig. 1a and b). General examination revealed no other significant symptoms, and all laboratory data were normal. A biopsy specimen was obtained from the abdominal lesion. Histological examination of this specimen showed multiple ducts surrounded by fibrous stroma in the superficial dermis (Fig. 1c). The ducts were formed by two layers of epithelial cells and were filled with amorphous keratinous materials. Some of the cells showed a tadpole-like configuration. We also found basal layer hyperpigmentation in the epidermis and lymphocytic infiltration in the upper dermis. Staining for carcinogenic embryonic antigen (CEA) was positive for the keratinous cyst samples as well as for materials within the cysts and ductal lumina. Clinical and histological findings were compatible with the diagnosis of eruptive syringoma.

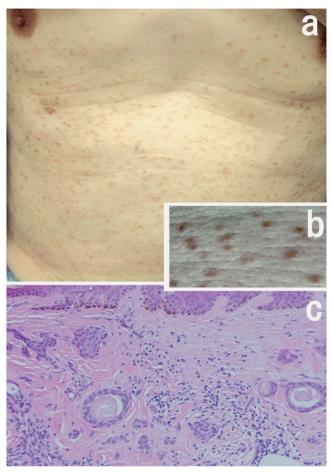


Fig. 1. Clinical and histological findings. (a, b) Multiple brownish erythematous papules distributed on the anterior and lateral sides of the trunk and on the upper thighs. (c) Multiple ducts surrounded by fibrous stroma in the superficial dermis. The ducts are filled with amorphous keratinous material. Some of the cells have a tadpole-like configuration.

## DISCUSSION

Syringoma may manifest as single or multiple papules localized on the eyelids. It affects 0.6% of the population worldwide. The eruptive form is a rare variant of syringomas (4, 5). Syringomas are more common in women, and the eruptive form also has a predilection for women. However, in contrast to classical syringoma, the eruptive type occurs before or during puberty in most cases (6). The clinical diagnosis of eruptive syringoma is relatively difficult, as it can be confused with other skin diseases, including acne vulgaris, sebaceous hyperplasia, milia, and lichen planus (7). Thus, histological examination is crucial for its

definitive diagnosis. Our case was that of a male patient with eruptive syringoma that had first appeared when he was approximately 60 years old. These factors made the clinical diagnosis more difficult. To the best of our knowledge, this is the latest age of onset amongst all the eruptive cases reported in the medical literature.

The pathogenesis of eruptive syringoma is obscure. Syringoma-like eccrine sweat duct proliferation has been reported in association with several skin conditions, for example alopecia areata, prurigo nodularis, and radiation dermatitis (8). Guitart et al. (9) reported a case of eruptive syringoma that was associated with lymphocytic inflammatory reaction, resulting in tortuous hyperplastic changes in the eccrine gland duct. They proposed the term "syrigomatous dermatitis" for such a case. In our patient, careful assessment revealed that the skin lesions had deteriorated after the cerebral infarction and oral carbamazepine therapy. A case of post-pubertal eruptive syringoma triggered by anti-epileptic drugs, namely, valproic acid and carbamazepine, has been reported (10). The same drug, carbamazepine, may have played a role in the exacerbation of syringoma in the previous case and in our patient. The pathogenesis of eruptive syringoma, especially of late-onset cases, may therefore involve some correlation between skin diseases and drugs that cause inflammatory changes in the eccrine ducts.

## REFERENCES

- Friedman SJ, Butler DF. Syringoma presenting as milia. J Am Acad Dermatol 1987; 16: 310–314.
- Lentini M, Schepis C. Eruptive widespread papular eruption on the abdomen: a quiz. Clear cell syringoma, eruptive variant. Acta Derm Venereol 2011; 91: 108–109.
- 3. Tsunemi Y, Ihn H, Saeki H, Tamaki K. Generalized eruptive syringoma. Pediatr Dermatol 2005; 22: 492–493.
- Soler-Carrillo J, Estrach T, Mascar JM. Eruptive syringoma: 27 new cases and review of the literature. J Eur Acad Dermatol Venereol 2001; 15: 242–246.
- 5. Marrogi AJ, Wick MR, Dehner LP. Benign cutaneous adnexal tumors in childhood and young adults, excluding pilomatrixoma: review of 28 cases and literature. J Cutan Pathol 1991; 18: 20–27.
- Garrido-Ruiz MC, Enguita AB, Navas R, Polo I, Rodríguez Peralto JL. Eruptive syringoma developed over a waxing skin area. Am J Dermatopathol 2008; 30: 377–380.
- Patrizi A, Neri I, Marzaduri S, Varotti E, Passarini B. Syringoma: a review of twenty-nine cases. Acta Derm Venereol 1998; 78: 460–462.
- Yoshii N, Kanekura T, Churei H, Kanzaki T. Syringomalike eccrine sweat duct proliferation induced by radiation. J Dermatol 2006; 33: 36–39.
- Guitart J, Rosenbaum MM, Requena L. Eruptive syringoma: a misnomer for a reactive eccrine gland ductal proliferation? J Cutan Pathol 2003; 30: 202–205.
- Oztürk F, Ermertcan AT, Bilaç C, Temiz P. A case report of postpubertal eruptive syringoma triggered with antiepileptic drugs. J Drugs Dermatol 2010; 9: 707–710.