Syringoma presenting as symmetric eruptive papules on the forearms

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One of the benign tumors of the sweat glands is a syringoma. A rare subtype of this tumor is the eruptive type, which is often seen before or during puberty. Here we report a case of eruptive syringoma in a 15-year-old girl. A 15-year-old girl was visited in our department, with a three-year history of numerous tan-colored papules territorialized on both the forearms. There were no other skin or systemic findings, and our differential diagnoses included xanthoma, lichen planus, and sarcoidosis. A skin biopsy was performed, revealing mild epidermal acanthosis. There were ductal structures lined by a double epithelium in association with elongated, tadpole-like epithelial cells in the dermis. Dermal collagen had thickened. Inflammatory cells were inconspicuous. Taken together, the above morphologic findings confirmed the diagnosis of an eruptive syringoma. Clinical diagnosis of eruptive syringoma is hard and histological evaluation is decisive for achieving the correct diagnosis.

Keywords: syringoma, eruptive papules

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INTRODUCTION

Syringoma is taken from the Greek word *syrinx*, which means pipe or tube. Kaposi and Biesiadeki first introduced syringoma in 1872 as "lymphangioma tuberosum multiplex" [1]. Based on clinical findings and associations, Friedman and Butler performed the following classification: localized form, familial form, a form associated with Down's syndrome, and generalized form that enfolds multiple and eruptive syringomas [2].

Eruptive syringoma is an uncommon subtype that was first explained by Jacquet and Darier in 1887 [3]. It is determined by small, flesh-colored papules seen in consecutive crops on the skin, especially over the anterior chest, neck, upper abdomen, axillae, and periumbilical region [4]. The lesions are bilateral, symmetrical, and have both follicular and nonfollicular distribution. The probability of a diagnosis of eruptive syringoma in biopsies is about one in 2500 biopsies, indicating its rarity [5]. Here, we explain the case of an otherwise healthy 15-year-old girl with the sudden emergence of small, flesh-colored papules on the bilateral forearms. The diagnosis of eruptive syringomas restricted to just the forearms is rare.

CASE REPORT

A 15-year-old otherwise healthy girl was

introduced to our dermatology clinic with a three-year history of numerous, tan-colored, elevated eruptions over both forearms. The lesions began as limited papules and then gradually spread over the entire surface of the forearms. According to the patient, the lesions were asymptomatic. She denied any similar eruptions in the family, and there was no significant drug usage or systemic disorder in her past medical history. Her parents were not relatives. On general appearance, she was conscious, alert, and afebrile; the systemic evaluation was unremarkable except for skin eruptions. Skin lesions had upset her, though there was no evidence of stimulant factors or agents that improved or exacerbated the condition. The patient had taken several medications, including topical steroids, which did not work. On dermatologic examination, numerous painless tan-colored papules with several millimeters in diameter were seen over both the forearms' extensor and flexor aspects (Figures 1 and 2). There were no similar lesions elsewhere on her skin, and no material came out when we pressed the papules. The nails, hair, and mucosas were normal, and the laboratory data were unremarkable. The dermatologic differential diagnoses included xanthoma, lichen planus, and sarcoidosis. A skin biopsy was performed to make a definitive diagnosis, with the histological sections revealing mild epidermal acanthosis. Furthermore, there were ductal structures lined by a double epithelium in association with elongated tadpole-like epithelial cells in the dermis. Dermal collagen had thickened. Inflammatory cells were inconspicuous (Figure 3). Taken together, the above morphologic findings confirmed the diagnosis of an eruptive syringoma. We talked to her parents, and they were relieved because the disease was not dangerous.

DISCUSSION

The characteristic of an eruptive syringoma is that it is more common in women and can be seen at any age. However, it is seen more under the age of 15 [5]. Its etiology is not well known. The higher prevalence of eruptive syringomas in women and the presence of progesterone receptors in the tumor cells on immunohistochemistry indicate hormonal effects in the pathogenesis [6]. On the other hand,

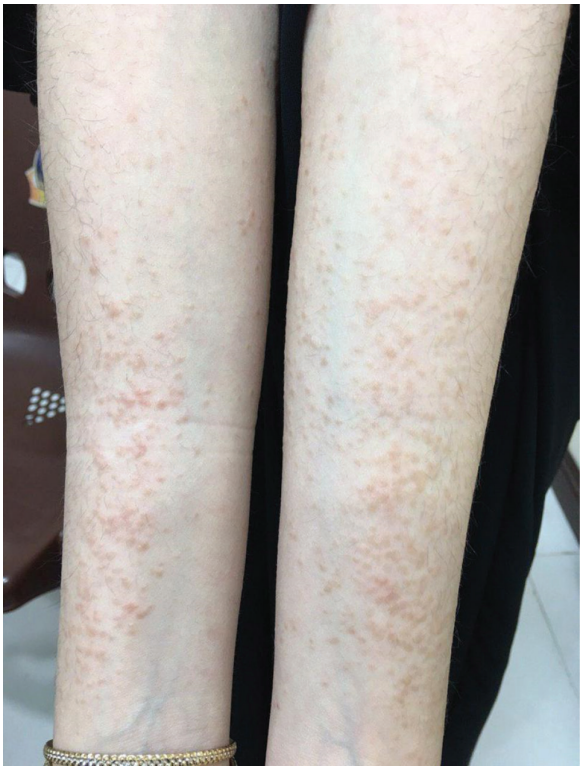

Figure 1. Numerous tan-colored papules are present over the flexor aspect of both forearms.

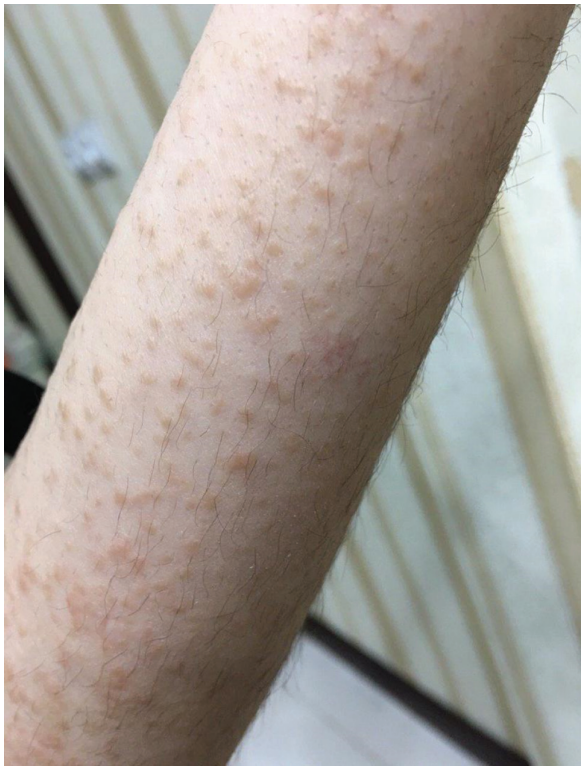

Figure 2. Numerous tan-colored papules are present over the extensor aspect of the forearm.

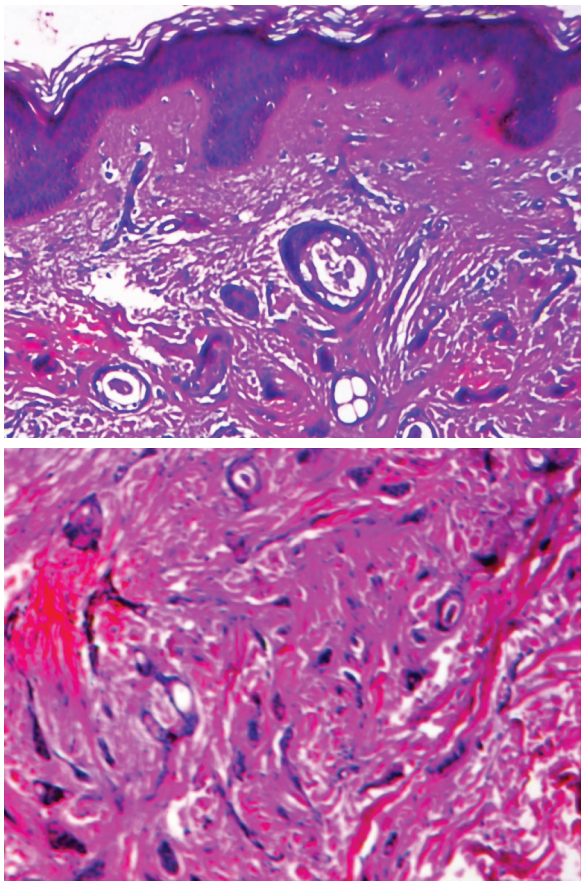

Figure 3. Sections show ductal structures lined by a double epithelium in association with elongated tadpole-like epithelial cells in the dermis. Dermal collagen is thickened (H&E ×10 upper panel and ×40 lower panel).

the onset of the disease has been reported after an inflammatory condition such as eczema [7]. Guitart *et al.* [6] believed that eruptive syringoma is not a true neoplasm but is rather a reactive process that involves the eccrine ducts. If this belief is correct, the name 'syringomatous dermatitis' would be more fitting. Experience shows that the disease is asymptomatic in most cases and there is rarely itching [8]. Clinically, the disease should be distinguished from the following: sarcoidosis, lichen planus, eruptive xanthoma, urticaria pigmentosa, hidrocystoma, and granuloma annular.

Definitive diagnosis is based on microscopy because eruptive syringoma has unique microscopic findings [9]. The most common parts of the body affected by this disease include the neck, chest, abdomen, shoulder, and pubic area [10]. It may occasionally affect the forearms, as seen in the present case [6,7]. Although there is no comorbid disease in most cases, rare cases of malignant diseases such as carcinoid tumors, melanoma, breast cancer, and acute myeloid leukemia have been reported [11]. There is also a case of acral syringomas with multiple trichoepitheliomas on the face [12]. The disease may regress on its own, though this event is rare. There is no documented therapy. Methods commonly used include electrodesiccation, dermabrasion, cryotherapy, laser, chemical peels, and topic retinoids [13]. We reported this case because it was rare, with lesions being distributed symmetrically and limited to the forearm.

Conflict of Interest: None declared.

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