CASE REPORT

Lymphangioma circumscriptum of the vulva mimicking genital wart: A case report

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Received 20 November 2012; accepted 29 November 2012
Available online 3 January 2013

KEYWORDS
Lymphangioma circumscriptum; vulva

Abstract A 31-year-old woman presented for evaluation of multiple verrucous, coalescent papules on the vulva. A histopathological examination revealed acanthotic epidermis and cystic proteinaceous fluid-filled spaces in the papillary dermis. The clinical and histological features were compatible with lymphangioma circumscriptum of the vulva which rarely occur in this location. We describe a new case of LC with vulvar involvement.

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1. Introduction

Lymphangioma circumscriptum, the common form of cutaneous lymphangioma, is characterized by persistent, multiple clusters of translucent vesicles that usually contain clear lymph fluid. (Patel et al., 2009) Lymphangioma circumscriptum (LC) is either primary (usually present at birth or develops in early childhood) or secondary (induced by impairment of lymph flow). Most commonly, lymphangioma circumscriptum is found on the proximal extremities, trunk, axilla, and oral cavity but also may occur on the penis, scrotum and rarely in the vulva (Vlastos et al., 2003; Swanson, 2006)

2. Case report

A 31-year-old woman attended our clinic with multiple skin coloured papular lesions on the vulva. The lesions had developed when the patient was 15 years old. There was neither any preceding history of local trauma nor any drainage of fluid from the lesions. She had no other organ complaints. The lesions were increased gradually with the time. On examination, there were multiple verrucous, coalescent papules on the vulva (Figure 1). No excoriation, crusting or oozing was observed. The remaining genital and physical examination was normal. Routine laboratory tests including complete blood count and differential WBC counts were within normal limits. Erythrocyte sedimentation rate was 35 mm/hr. Mantoux test was negative and X-ray chest was normal. The differential diagnoses were, based on clinical presentation, genital warts, lymphangioma circumscriptum and cystic hygroma. A biopsy specimen
was obtained from the lesions and histopathological examination revealed focal parakeratosis, focal acanthosis and elongation of the rete ridges. In the papillary dermis, there are cystic proteinaceous fluid-filled spaces. Also noted in the sections is superficial perivascular lymphohistiocytic infiltrate (Figure 2). The diagnosis of LC was entertained. The patient was treated initially with topical podophyllin 25% which led to flattening of the surface of the lesions. Later on, we treated the patient with many sessions of cryotherapy, with which the patient showed good improvement.

3. Discussion

A lymphangioma or lymphatic malformation represents a congenital proliferation of lymphatic vessels. There are three types of lymphangioma: circumscribed, cavernous, and cystic (Brown and Stenchever, 1989). Lymphangioma circumscribed (LC) is either primary (usually present at birth or develops in early childhood) or secondary (induced by impairment of lymph flow). Secondary lymphangioma is also termed acquired lymphangioma and lymphangiectasis. The most common form of cutaneous lymphangioma is lymphangioma circumscribed, which arises in infancy but may occur at any age. It is characterized by small clusters of vesicles; measuring about 2–4 mm; that usually contain clear lymph fluid (Patel et al., 2009). The typical history involves a small number of vesicles on the skin at birth or shortly after. In subsequent years, they tend to increase in number, and the area of skin involved continues to expand. Vesicles or other skin abnormalities may not be noticed until several years after birth. Usually, lesions are asymptomatic, but, occasionally, patients may have spontaneous episodes of minor bleeding and copious drainage of clear fluid from ruptured vesicles. Although it may appear localized to the dermis, this neoplasm frequently extends deeply and laterally. The lesions can have a warty appearance; as a result, they are often confused with warts as in our patient. The sites of predilection are the proximal extremities, trunk, axilla, and oral cavity, especially the tongue. Involvement in other areas, such as the scrotum, is not uncommon (Vlastos et al., 2003; Swanson, 2006). Vulvar LC can be asymptomatic (Handfield-Jones et al., 1989), pruritic (Sood et al., 1991), burning (Fisher and Orkin, 1970) or painful (Sood et al., 1991). In our patient, pruritis was the only symptom. Although various modalities of treatment have been suggested, surgical excision is the treatment of choice for the lesions confined to superficial dermis with highest success rate (Browse et al., 1986).

Other treatment modalities include X-rays (O’Cathail et al., 1985), radiotherapy (Dent et al., 1996), cryotherapy, sclerotherapy (AlGhamdi and Mubki, 2011 May), cautery, argon laser (Landthaler et al., 1982), CO2 laser (Huilgol et al., 2002) and pulse dye laser (Lai et al., 2001). Our patient was treated with cryotherapy with good improvement.

References