Lymphangioma Circumscriptum of the Penis

Sir,

Lymphangioma circumscriptum (LC) is a rare, benign saccular dilatation of thin-walled lymph vessels, presenting as a local eruption of persistent, grouped, translucent vesicles. Usually it is present at birth, but it may become apparent at any age. It is more common in females and any cutaneous site may be affected (1). We here report its unusual penile localisation in a 27-year-old man.

CASE REPORT

In 1991 the patient had noted a few vesicular, occasionally oozing lesions localized around the urethral meatus. Two years later he began complaining of hemorrhagic diarrhea. Diagnosis of ulcerative colitis was made and treatment with mesalazine 1.6 g/day was started.

Clinical examination revealed a few translucent, thick-walled vesicles filled with a clear fluid and grouped in an area of about 1 cm^2 (Fig. 1).

A specimen from the excisional biopsy revealed dilated lymph vessels in the superficial dermis, lined by a simple layer of endothelial cells with moderate acanthosis and hyperkeratosis.

An ultrasound scan of the penis and perineal area showed no involvement of deep tissues. Diagnosis of LC was made.

DISCUSSION

Cutaneous lymphangiomas can be due either to a developmental abnormality of the lymphatics or to their obstruction secondary to surgical operation, irradiation, Crohn's disease, tuberculosis and other inflammatory diseases (2).

Developmental abnormalities are named LC. In this case the origin of the vessel malformation remains unknown.

According to Whimster, the underlying defect of LC consists essentially of a collection of large-muscular coated lymphatic cisterns in the deep subcutaneous tissue, which do not communicate directly with the lymphatic system but represent a sequestrated part of it. Instead, they would communicate via dilated dermal lymphatics with the superficial vesicles. The latter are saccular dilatations of superficial lymphatics secondary to raised pressure transmitted from the pulsating cysterns beneath. Cisterns connecting vessels and vesicles represent a closed system, in which there is no real lymph circulation.

The absence of lymphedema in LC is explained by the possible coexistence of normal lymphatics with proper central connections that ensure efficient lymph drainage (3).

The cases secondary to obstruction of the lymphatics are referred to as lymphangiectasias or acquired lymphangioma. Both clinically and histologically, LC and lymphangiectases are indistinguishable. Only the medical history may help (4).

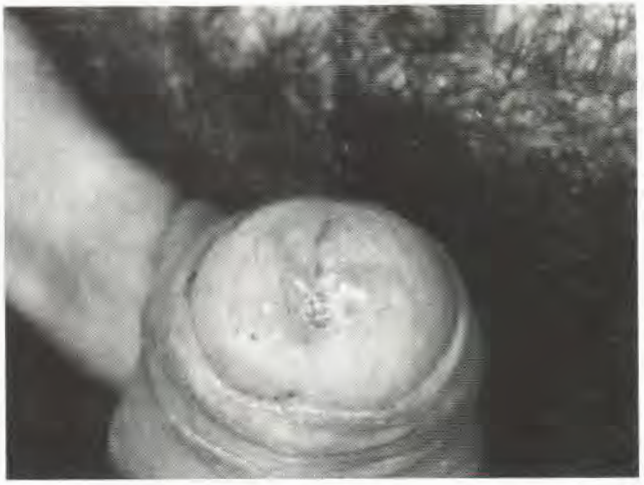

Fig. 1. Grouped vesicles mainly localized around urethral meatus.

In many cases, LC spreads to a larger area in the dermis and subcutaneous tissue than the vesicular eruption on the surface could suggest (5). This possibility makes the ultrasound scan mandatory.

The development of ulcerative colitis only 2 years after the LC occurrence suggests that in our case LC could be related to an obstruction secondary to a still silent bowel disease.

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