Lymphangioma circumscriptum of the penis: a case report

I. Kokcam

SUMMARY

We report a case of lymphangioma circumscriptum of the penis in a 19-year-old male. The lesions developed during puberty and resembled molluscum contagiosum and genital herpes. The case is presented because of its rarity and to increase diagnostic awareness and treatment with non-surgical intervention.

KEY WORDS

lymphangioma circumscriptum, penis, molluscum contagiosum

Introduction

Lymphangioma circumscriptum (LC) is a developmental anomaly of the lymphatic vascular system. LC rarely involves the penis; however, when such lesions occur on the penis, they may be misdiagnosed as vesicular or tumoral diseases in the genital area (1, 2). Recognition and treatment of genital lesions of LC is important in order to alleviate the anxiety associated with having an STD. Additionally, these lesions must be treated properly because they may act as a portal of entry for infections, be cosmetically embarrassing, and, if large, cause functional impairment (3, 4).

Case report

A 19-year-old man applied to our outpatient clinic for evaluation of multiple translucent and hemorrhagic vesicles on his penis. Over the previous three years, these lesions occasionally bled and oozed serosanguinous fluid. Physical examination confirmed that the patient had multiple translucent and hemorrhagic vesicles on the shaft of the penis and the glans. The surface of the lesions was smooth and some were umbilicated, resembling molluscum contagiosum (Figure 1). There was no associated lymphedema on the penis. Abdominal, pelvic, and penile ultrasonographic examinations were within normal limits, as were also hematological and biochemical parameters. Histological examination showed numerous dilated lymphatic vessels and mononuclear inflammatory cells throughout the papillary and reticular dermis (Figure 2).

The patient refused surgical intervention; therefore we recommended that the patient avoid mechanical trauma and cleanse the area daily with antiseptic agents. We also recommended that the patient apply silver sulfadiazine cream topically to any ruptured lesions. Over the next two years of follow-up, the patient did not develop new lesions. Instead, the overall number of the lesions declined markedly and no other complications were observed.

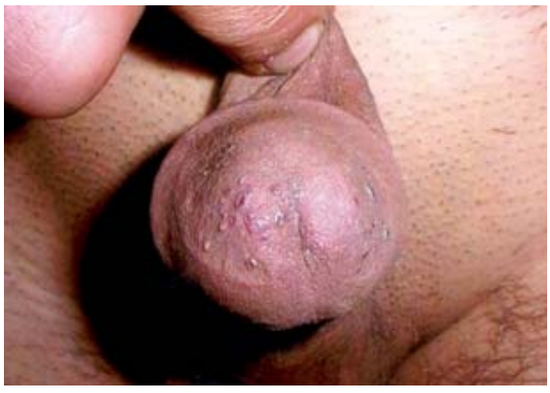

Figure 1. A few umbilicated and hemorrhagic vesicles resembling molluscum contagiosum are seen around the external urethral meatus and glans penis.

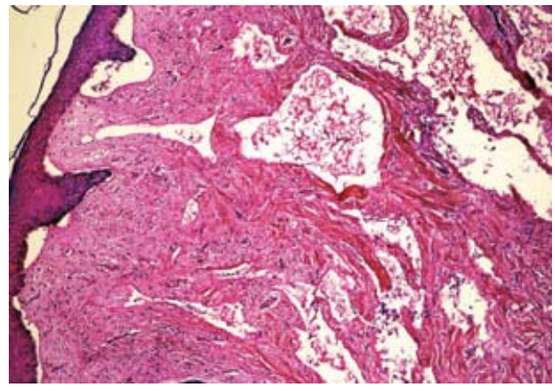

Figure 2. Histopathological examination of cutaneous biopsy showing dilated lymphatic channels in the upper dermis (H&E stain, X 200).

Discussion

The penis is a highly uncommon site for LC, with a total of only 10 cases of penile LC previously reported (1, 3, 5–7). These reports suggest that LC of the penis may be either congenital or acquired. Acquired cases appear to develop most frequently after infections of lymphatic channels, irradiation, or surgery (1, 2, 7). However, this case of penile LC appeared spontaneously in adulthood.

The diagnosis of penile LC is easy when the clinician is aware of the disease; however, a biopsy of such lesions may be necessary to confirm the diagnosis and to formulate appropriate treatment. Histologically, penile LC is characterized by greatly dilated lymph spaces in the upper dermis and the subcutis. The lumen is filled with lymphatic fluid, but often contains red blood cells, lymphocytes, macrophages, and neutrophils (1). The histological findings of the case reported here were consistent with these features.

There is currently no proven medical care for LC. The main goal of treatment is typically cosmetic; however, treatment can also be applied to limit complications. In this study we pursued a "watch and wait" policy, which is advisable if the condition is asymptomatic (8). The only radical cure is to remove the superficial component as well as the deeper lymphatic cisterns. This is achieved through surgical destruction or laser ablation of lesions. Electrocautery, cryotherapy, sclerosants, incision and drainage, and carbon dioxide laser can also be used to reduce the risk of infection and to reduce lymphorrhea (1, 8).

In conclusion, penile lesions associated with LC may pose a diagnostic challenge, the risks of which are misdiagnosis and mistreatment. Physicians must therefore keep LC in mind when vesicular lesions of the penis exist.

REFERENCES

1. Gupta S, Radotra BD, Javaheri SM, Kumar B. Lymphangioma circumscriptum of the penis mimicking venereal lesions. J Eur Acad Dermatol Venereol. 2003;17(5):598–600.

2. Tsur H, Urson S, Schewach-Millet M. Lymphangioma circumscriptum of the glans penis. Cutis. 1981;28:642–3.

3. Maloudijan M, Stutz N, Hoerster S, et al. Lymphangioma circumscriptum of the penis. Eur J Dermatol. 2006;16(4):451–2.

4. Harwood CA, Mortimer PS. Acquired vulval lymphangiomata mimicking genital warts. Br J Dermatol. 1993;129:334–6.

5. Swanson DL. Genital lymphangioma with recurrent cellulitis in men. Int J Dermatol. 2006;45(7):800–4.

6. Ferro F, Spagnoli A, Villa M, Papendieck CM. A salvage surgical solution for recurrent lymphangioma of the prepuce. Br J Plast Surg. 2005;58(1):97–9.

7. Penko M, Bartenjev I, Zgavec B, Potocnik M. Lymphangioma circumscriptum. Acta Dermatovenerol Alp Pannonica Adriat. 1996;5(2):51–6.

8. Lebwohl MG, Heymann WR, Berth-Jones J, Coulson I, editors. Treatment of Skin Disease. 2nd ed. London: Mosby; 2006.

AUTHOR'S ADDRESS

Ibrahim Kokcam MD, Department of Dermatology, Faculty of Medicine, Firat University, Firat Medical Center, 23119 Elazig, Turkey, E-mail: ikokcam@firat.edu.tr