CASE REPORT

Sclerosing lymphangitis of the penis associated with marked penile oedema and skin erosions

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SUMMARY

Sclerosing lymphangitis of the penis is a benign, under-reported condition consisting of a asymptomatic firm cord-like swelling around the coronal sulcus of the penis usually affecting men in the second or third decade of life. Penile oedema and erosions are rarely reported. Clinical signs may be remarkable contrasting with the self-limited character of the disease. We report a new case of sclerosing lymphangitis of the penis occurring in a 59-year-old patient marked by penile swelling and several overlying skin erosions, and discuss the clinical features and the pathogenesis aspects of the disease.

BACKGROUND

Sclerosing lymphangitis of the penis is an uncommon benign condition. The incidence may be underestimated as it is paucisymptomatic and has spontaneous resolution. We report an unusual case of sclerosing lymphangitis of the penis with marked oedema and skin erosions in an elderly patient.

CASE PRESENTATION

A 59-year-old circumcised man, with a medical history of diabetes mellitus, presented with painless penis swelling which appeared 2 days after intense sexual intercourse. Examination showed marked penile oedema with skin-coloured, firm, non-tender serpiginous cord-like lesion partly encircling the coronal sulcus of the penis. Numerous erosions through the overlying skin were present (figure 1). There were no urethral discharge, lymphadenopathy and signs of systemic or local inflammation.

INVESTIGATIONS

Screening tests for sexually transmitted diseases, urine examination, urethral culture and

inflammatory markers were negative. A skin biopsy was indicated but declined by the patient. Doppler ultrasound examination of the penis didn't show superficial dorsal penile vein thrombosis.

TREATMENT

The patient was advised a week sexual abstinence and was treated with oral tiaprofenic acid 200 mg three times per day.

OUTCOME AND FOLLOW-UP

A marked decrease of the symptoms was noted after only 3 days (figure 2). Penile swelling and skin erosions resolved within 8 days.

DISCUSSION

Sclerosing lymphangitis of the penis, also known as benign transient lymphangiectasis of the penis,^{1 2} affects usually sexually active men in the second or third decade of life,³ although cases as young as 18 and as old as 66 years of age have been reported.¹ To date, it has no clear pathogenesis and aetiology. While the link with venereal diseases were speculated in first described cases,⁴ a venous or lymphatic thrombosis due to trauma after prolonged, frequent or vigorous sexual activity (intercourse or masturbation) is, currently, the most widely accepted hypothesis.⁵ Lymphatic origin is supported by clinical (translucent lesion), anatomical and histological findings. Furthermore, some reports have suggested that circumcision may be a precipitating factor because it may impair lymphatic clearance.⁶ Tanii *et al*⁷ suggested a venous origin as the affected vessels stained positively with factor VIII-related antigen. Clinically, the disease has a sudden onset with an indurated, painless and rarely eroded skin-coloured cord-like swelling around the coronal sulcus of the penis.^{1 3 8} The lesion develops usually within 7 days after intense sexual activity.⁸ Paraclinical investigations are not required for diagnosis. However, screening for sexually transmitted diseases is desirable as they have been associated with sclerosing

Figure 1 Clinical aspect of sclerosing lymphangitis of the penis. Firm, non-tender serpiginous cord-like lesion partly encircling the coronal sulcus of the penis associated with a marked oedema of the penis (A,B). Two skin erosions are seen in the lower part of the serpiginous cord-like lesion (A). Please note that the red colouration of the penis and scrotum is related to a self-applied aqueous eosin.

Figure 2 Clinical aspect after 3 days of treatment. A marked decrease of oedema (A,B) and erosions (A) is noted.

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lymphangitis of the penis in almost one-fourth of all published cases.³ The main differential diagnosis is Mondor's disease of the penis defined as a thrombophlebitis of the superficial dorsal penile vein. In doubtful cases, a Doppler ultrasound examination of the penis may be helpful.^{1,3} Sclerosing lymphangitis of the penis is a self-limiting disease.⁸ Most lesions spontaneously resolve within days to weeks. Management includes reassurance and sexual abstinence of several weeks. Usually no treatment is required.¹⁻³ In some reported cases, non-steroidal anti-inflammatory drugs have been used with good outcome.⁹

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Competing interests This is a well-presented case report. The case is not so rare but it can be interesting to primary care physicians.

Patient consent Obtained.

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Learning points

- ▶ Sclerosing lymphangitis of the penis is a benign condition. Patients without associated sexually transmitted infection should be reassured about the self-limiting character of the disease.
- ▶ Clinical presentation can be spectacular. The existence of penile oedema and/or skin erosions could be misleading. Frequent or vigorous sexual activity few days before the onset of the symptoms is the diagnosis keystone.
- ▶ Doppler ultrasound examination of the penis is useful in difficult cases to rule out the diagnosis of Mondor's disease of the penis (superficial dorsal penile vein thrombosis).
- ▶ Therapeutic abstention is the rule in most cases. Non-steroidal anti-inflammatory drugs lead to rapid improvement of symptoms.

REFERENCES

- 1 Tamraz H, Kibbi A-G, Abbas O. Firm cord-like band over the penile shaft. *Int J Dermatol* 2012;51:29–30.
- 2 Hutchins P, Dunlop EM, Rodin P. Benign transient lymphangiectasis (sclerosing lymphangitis) of the penis. *Br J Vener Dis* 1977;53:379–85.
- 3 Rosen T, Hwang H. Sclerosing lymphangitis of the penis. *J Am Acad Dermatol* 2003;49:916–8.
- 4 Hoffman E. Vortanschung primärer Syphilis durch gonorrhoeische lymphangitis. *AMunchehen medizinische Wochenschrift* 1923;70:1167–8.
- 5 Cantalejo C, Fernández-Crehuet JL, Marcos A, et al. [Nonvenereal sclerosing lymphangitis of the penis: presentation of a clinical case]. *Actas Dermosifiliogr* 2005;96:395–7.
- 6 Broadus SB, Leadbetter GW. Surgical management of persistent, symptomatic nonvenereal sclerosing lymphangitis of the penis. *J Urol* 1982;127:987–8.
- 7 Tanii T, Hamada T, Asai Y, et al. [Non-venereal sclerosing lymphangitis of the penis revealed as phlebitis by positive factor VIII-related antigen]. *Nihon Hifuka Gakkai Zasshi* 1983;93:1347–9.
- 8 Babu AK, Krishnan P, Andezuth DD. Sclerosing lymphangitis of penis - literature review and report of 2 cases. *Dermatol Online J* 2014;20:9.
- 9 Papeš D, Altarac S, Antabak A, et al. Nonvenereal sclerosing lymphangitis of the penis. *Acta Dermatovenereol Croat* 2015;23:150–1.

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