

Case Presentation

Sclerosing lymphangitis of penis- literature review and report of 2 cases

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Dermatology Online Journal 20 (7): 9

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Abstract

Sclerosing lymphangitis of the penis is a condition related to vigorous sexual activity, manifesting as an asymptomatic firm cord-like swelling around the coronal sulcus of the penis. Since, it is self-limiting, only reassurance along with abstinence from sexual activity are required. In addition to reporting two new cases, we review and discuss the medical literature for this condition.

Keywords: Sclerosing lymphangitis, Mondor's disease of penis, Benign transient lymphangiectasis, Lymphangiofibrosis thrombotica oclusiva, Mondor's phlebitis of penis

Introduction

Sclerosing lymphangitis of the penis is a condition related to vigorous sexual activity, manifesting as an asymptomatic, firm cord-like swelling around the coronal sulcus of the penis. It is self-limiting, hence only reassurance along with abstinence from sexual activity is required.

Case synopsis

Case 1

A 28- year-old man presented with an asymptomatic linear cord- like swelling around the penis of 3 days duration. He gave a history of frequent masturbation but denied sexual contact. There was no history of genital ulcers, urethral discharge, or inguinal lymphadenopathy. Examination revealed a healthy young man who had a skin colored, firm, non-tender, approximately 3mm wide cord- like swelling just above and partly encircling the coronal sulcus of the penis (Figure 1).

Case 2

A 35-year old man presented with an asymptomatic cord-like swelling around the penis, which was noticed a day after vigorous sexual intercourse. On examination there was a skin colored, non-tender, firm, cord-like swelling around the coronal sulcus of the penis (Figure 2).

Based on the characteristic clinical findings a diagnosis of sclerosing lymphangitis of the penis was made in both cases. Both of the patients were reassured and advised to abstain from sexual activity. The lesions disappeared after 4 weeks.



Figure 1. Sclerosing lymphangitis



Figure 2. Sclerosing lymphangitis

Discussion

Non-venereal sclerosing lymphangitis of the penis is characterized by the sudden appearance of an indurated cord around the coronal sulcus of the penis. The lesion usually develops within 7 days after vigorous sexual intercourse or masturbation. It has been related to microtrauma after intense sexual activity [1]. The most likely explanation for the pathogenesis is that unduly prolonged or frequent sexual intercourse causes traumatic obstruction of a large lymphatic vessel. The condition is observed usually in the second or third decade, although cases as young as 18 and as old as 66 years of age have been reported. Non-venereal sclerosing lymphangitis of the penis causes little discomfort and usually resolves spontaneously. Both factors may explain why the condition is uncommonly reported. A biopsy is not necessary in the early stages and initial treatment should be conservative. The condition can cause anxiety and embarrassment owing to its genital location, alarming appearance, and association with sex. Fortunately, resolution occurs spontaneously within 4-6 weeks without any complications, following abstinence from sexual intercourse and masturbation. Some individuals appear to be prone to penile lymphangitis, possibly because of anatomical variation; recurrences are known to occur.

It is difficult to differentiate Mondor's disease of the penis from sclerosing penile lymphangitis because the symptoms, epidemiology, and etiology are similar and veins are histologically very similar to lymphatics. Mondor's disease of the penis, a superficial thrombophlebitis of the dorsal penile veins, presents as a rope-like cord on the dorsum of the shaft or sulcus. Many factors can predispose to the development of penile dorsal vein thrombophlebitis. These include trauma, excessive sexual activity (as well as prolonged sexual abstinence), local or distant infections, venous obstruction secondary to bladder distension, pelvic tumors, constrictive genital devices, and injection of drugs into the dorsal penile vein. The cord is a thrombosed dorsal vein that has become thickened and adherent to the underlying skin. Often, the lesion extends superiorly to the suprapubic area. Patients have throbbing and aching pain that can be episodic or constant [2]. Immunohistochemical markers, such as CD 31 and D240, allow discrimination between small veins and lymphatic vessels [3]. In a study by Kumar et al [4], 18 (1.39%) of 1296 patients attending a sexually transmitted disease clinic were diagnosed with Mondor's disease. Histopathological specimens showed prominent vessels with plump endothelial cells and thickened blood vessel walls. In this study, non-lymphatic vessels, mainly veins were predominantly involved. Hence, Mondor's thrombophlebitis or Mondor's disease of the penis may be diagnosed if a cord-like subcutaneous swelling in the coronal sulcus or dorsal penile shaft originates from a vein.

A study by Tani et al [5] suggested that the affected vessels were veins because they stained positively with factor VIII-related antigen. Marsh et al [6] reported a case of non-venereal sclerosing lymphangitis of the penis in which light and electron microscopy revealed a lymphatic collecting vessel with a fibrin thrombus in the process of recanalization and vessel wall fibrosis. They proposed the term lymphagiofibrosis thrombotica occlusiva. Compromised lymphatic stasis is suggested as a provoking factor for the dilatation and clinically striking firm thickening of the collecting vessel. No microorganisms were recognized. Hutchins P et al [7] suggested that the condition is a transient and benign dilatation of a lymphatic vessel and recommended a name change to transient lymphangiectasis of the penis. Van de Staak [8] reported two non-venereal cases that occurred immediately after genital herpes simplex infection. According to Rosen and Hwong [9], one-fourth of 105 patients reported up to 2003, "had a close temporal relation to uncomplicated gonorrhea, nonspecific urethritis, or a positive serologic test for syphilis."

Against the backdrop of frequent sexual activity, sexually transmitted diseases, and the use of aphrodisiacs and erection prolonging drugs, it is surprising that less than 135 of cases of sclerosing lymphangitis of the penis have been reported in the medical literature. Ghorpade [10] doubts that the number of actual cases is so small.

References

1. Nonvenereal sclerosing lymphangitis of the Penis : Presentation of a clinical Case .Cantalejo C, Fernandez- Crehuet JL, Marcos A ,Rodriguez- Pichardo A,Camacho F.Actas Dermosifiliogr. 2005 Jul – Aug ; 96 (6) : 395 -7.[PMID: 16476262]
2. Thrombosis of the dorsal vein of the penis (Mondor's Disease): A case report and review of the literature. Syed Sajjad Nazir and Muneer Khan. Indian J Urol. 2010 Jul-Sep; 26(3): 431–433. .[PMID: 21116369]
3. Immunohistochemical clues to the diagnosis of Mondor's disease of the penis .Alvarez -Garrido H, Sanz-Munoz C, Pericet – Fernandez L, Garrido - Rioss AA, Miranda –Romero A. Clin Exp Dermatol. 2009 Dec ; 34 (8) : e 663-5.[PMID: 19548938]
4. Mondor's Disease of Penis : a forgotten disease .Kumar B, Narang T , Radotra BD ,Gupta S. Sex Transm Infect .2005 Dec; 81(6) : 480-2.[PMID: 16326851]
5. Mondor's phlebitis of the penis – a study with factor VIII related antigen. Tanii T, Hamada T, Asai Y, Yorifugi T. Acta Derm Venereol. 1984; 64(4) : 337 -40.[PMID: 6209894]
6. Sclerosing lymphangitis of the penis: a lymphangiofibrosis thrombotica occlusiva. Marsch WC , Stuttgen G. Br J Dermatol. 1981 Jun ; 104 (6):687-95. .[PMID: 7248180]
7. Benign transient lymphangiectasis (Sclerosing lymphangitis)of the penis .Hutchins P, Dunlop EM ,Rodin P .Br J Vener Dis. 1977 Dec; 53 (6) : 379-85. .[PMID: 606334]
8. Non- venereal sclerosing lymphangitis of the penis following herpes progenitalis. Van de Staak W J .Br J Dermatol .1977 Jun ; 96 (6) : 679-80. .[PMID: 871405]
9. Sclerosing lymphangitis of penis .Rosen TR, Hwong H. J Am Acad Dermatol .2003 ; 49: 916-8. [PMID Number 14576679]
10. Adult with cord round the neck : Benign transient lymphangiectasis of the penis. Ghorpade S. Indian J Dermatol Venereol Leprol .2007 ; 73: 353-4. .[PMID: 17921623]