Nonvenereal Sclerosing Lymphangitis of the Penis

Sclerosing lymphangitis of the penis is a benign non-venereal lesion that mostly occurs in younger men between 20-40 years of age (1). Various terms have been used for this condition, including nonvenereal sclerosing lymphangitis of the penis, circular indurated lymphangitis of the penis, and benign transient lymphangiectasis of the penis.

A 19-year-old patient reported to our Clinic for a painless tumefaction in the corona of the penis that he had noticed several days ago (Figure 1). He was otherwise healthy, his history was unremarkable, and he denied genitourinary symptoms and any trauma to the area. He denied unprotected sexual activity. On examination, a 3 mm wide, whitish, firm, serpiginous cord-like structure was palpable beneath the inner preputial layer. It was painless, 2 cm long, and had not changed in appearance. STD testing was negative.

The diagnosis of sclerosing lymphangitis was established, and the patient was advised to avoid sexual activity for several weeks until the condition subsided. On control examination after two weeks, the lesion had diminished.

Sclerosing lymphangitis is usually described as a skin colored, serpiginous cord-like thickening on the penis that is of cartilaginous consistency. There are no signs of inflammation, and the lesion is painless. Usually the lesions occur shortly (24-48 hours) after sexual intercourse and resolves spontaneously within 2-3 weeks but may last up to 6 weeks (1).

The cause of sclerosing lymphangitis of the penis remains unclear, but repeated trauma due to vigorous sexual intercourse or masturbation and subsequent occlusion of lymphatic vessels are most likely the cause (1,2). Some reports have suggested that impaired lymphatic drainage and scaring following circumcision may be a predisposing factor but no clear connection has been established (2).

Although the condition is by definition non-venereal, it may be associated with an underlying sexually transmitted disease, and basic STD testing should be undertaken in all patients (3). Biopsy of the lesion is unnecessary but if undertaken will show a thickening of the lymphatic vessel walls, partial or total obliteration of the vessel lumen, and occasionally sparse chronic inflammatory infiltration (1).

Sclerosing lymphangitis is similar to penile Mondor's disease, which is the thrombophlebitis of the superficial dorsal penile vein and its branches. Some authors have even suggested that the two are actually the same entity because of the similarity in some cases. In the literature, several differences between Mondor's disease and sclerosing lymphangitis can be noted: superficial penile thromophlebitis is usually painful (but can also be painless) and, unlike sclerosing lymphangitis, often occurs on the penile shaft. Also, it can be much more extensive, with involvement of the entire shaft, which has not been reported for sclerosing lymphangitis. If only the venous branches in the coronal sulcus are affected, and there is no pain or inflammation, differentiating between the two conditions is difficult. In those cases doppler ultrasound examination can be used to confirm the diagnosis.

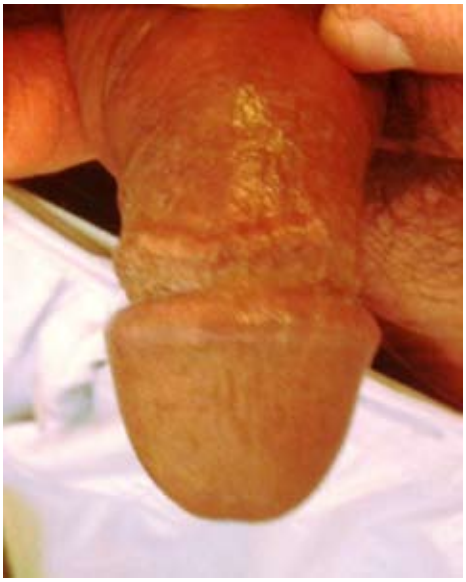

Figure 1. Sclerosing lymphangitis presenting as a painless, whitish, firm, serpiginous cord-like structure palpable in the coronal sulcus.

Acta Dermatovenerol Croat
2015;23(2):150-151

Other reported ways of discriminating between sclerosing lymohangitis and Mondor's disease include collection of yellow aspirate from the lesion (which supports the lymphatic origin of the disease), histological examination of the excised lesion, immunohistochemical CD31 and CD 34 marker analysis, and electron microscopic examination (2). Such extensive diagnostic work-up is not necessary because confined and painless cases of Mondor's disease that could be misdiagnosed as sclerosing lymphangitis do not require treatment and also resolve spontaneously. If the condition is painful or extensive it is certainly thrombophlebitis, and treatment with analgesics, local anesthetic injection, local heparin, or antibiotics (in cases of celulitis) may be indicated (4). In cases that are very painful and do not resolve (around 8% of cases) thrombectomy or resection of the affected vein can been undertaken (4).

It is important to reassure the patients that sclerosing lymphangitis is a self-limiting disease that resolves spontaneously within several weeks if they restrain from vigorous sexual activity until the condition subsides, but that it may recur after sexual activity has been resumed. No treatment is required. Nonsteroidal anti-inflammatory drugs (NSAID) have been recommended but without proven benefit. In recurring cases surgery may be undertaken with extirpation of the affected vessel (2).

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Received: February 19, 2014

Accepted: May 15, 2015