

BRIEF ARTICLES

Penile Mondor's Disease: Two Rare Cases

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INTRODUCTION

Penile Mondor's Disease (PMD) is a subset of Mondor's disease, which is a superficial thrombophlebitis of the chest wall or breast in women. In PMD, the dorsal vein of the penis is affected. The average patient is a twenty to forty year old male who presents with a firm, cord-like lesion on the dorsum of the penis 24 to 48 hours after prolonged sexual activity¹. The lesion may be painful or painless, and the pain is often exacerbated by exertion. Ultrasound is necessary to confirm the diagnosis, showing occlusion of the dorsal vein. Treatment is supportive with complete resolution in one to two months.

CASE DESCRIPTIONS

A 55-year-old male with no past medical history presented with the complaint of a five day history of a firm, painful area on the dorsal shaft of penis. He described a history of prolonged sexual activity before the painful area developed. Physical exam was significant for an indurated, pink-colored, palpable cord on the dorsolateral shaft of the

penis (figure 1). Ultrasound of the cord demonstrated isogeneity of the area (figure 2). Since no large or complex cystic structures were identified to suggest sclerosing lymphangitis, the diagnosis of penile Mondor's disease (PMD) was made. The patient was advised to take ibuprofen as needed for pain and to apply warm, wet compresses three times per day. The patient followed treatment recommendations and his lesion resolved.

Similarly, a 27-year-old male complained of a one month history of a painful bump on the dorsal shaft of his penis. He reported a history of frequent and prolonged sexual intercourse before the area developed, and he stated that sexual intercourse exacerbated the pain. Physical exam revealed a firm, brown, painful palpable cord over the dorsum of the penile shaft (figure 3). PMD was again suspected, and the patient was advised to abstain from sexual activity until the pain and elevated area resolved. He was also encouraged to use warm compresses and anti-inflammatories to control the pain. Ultrasound was suggested to confirm the diagnosis of PMD, but the patient did not follow-up for imaging studies.

FIGURES



Figure 1: PMD, Case 1. Circled is the palpable cord.



Figure 3: PMD, Case 2. Circled is the palpable cord.

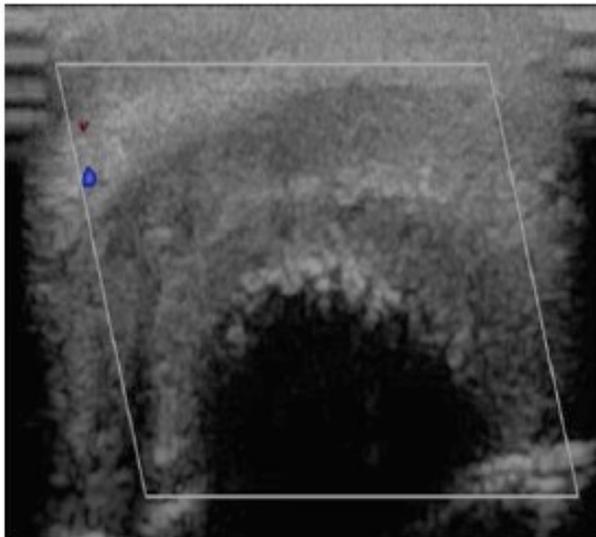


Figure 2: PMD, Case 1 ultrasound.

DISCUSSION

Both patients were diagnosed with penile Mondor's disease (PMD), which is a superficial thrombophlebitis of the dorsal vein of the penis. PMD is a rare variant of classic Mondor's disease, which is a more common superficial thrombophlebitis that occurs on the chest wall or breast in women. The most common cause of PMD is trauma due to frequent and prolonged sexual intercourse², but other risk factors include infections, surgery, cancer, and Virchow's triad of endothelial damage, venous stasis, and hypercoagulable state³.

The typical PMD patient is a twenty to forty year old male who presents with a firm, cord-like lesion on the dorsum of the penis 24 to 48 hours after prolonged sexual activity. The thrombosed vessel is often adherent to the overlying skin, and the area of thrombosis may extend to the suprapubic region¹. Patients may complain of continuous or throbbing pain and pain exacerbated by erection and sexual activity.

Color doppler ultrasound confirms the diagnosis of PMD by showing occlusion of the dorsal vein and absent flow signals. Color doppler ultrasound also differentiates PMD from sclerosing lymphangitis and Peyronie's disease; both diseases are in the differential for this type of presentation¹. Sclerosing lymphangitis is more common than PMD and is characterized by thrombosis of the lymphatic vessels. Thrombosed and dilated lymphatic vessels and preserved flow in the dorsal vein are seen on ultrasound⁴. Clinically, sclerosing lymphangitis may appear similar to PMD, but lack of pain is more frequent⁵. Peyronie's disease is a connective tissue disease that is characterized by fibrous plaques in the tunica albuginea on ultrasound and pain and abnormal curvature on clinical exam.

PMD is a relatively benign disease, and symptoms usually resolve within four to six weeks. Patients typically regain full vessel

permeability in nine weeks with or without medical treatment¹. Patients are advised to use anti-inflammatory agents and to restrict sexual activity to reduce pain and promote resorption of the thrombosis. After six weeks, patients who are symptomatic and have loss of flow on color doppler ultrasound are considered to be refractory to treatment. These patients may be topically treated with heparin creams. Thrombectomy and resection of the superficial penile vein may be performed if the thrombosis fails to resolve. Most importantly, early diagnosis and reassurance of the relatively benign nature of the disease helps reduce patient anxiety and concerns over sexual dysfunction. Follow-up to ensure that the thrombosis resolves is warranted. Currently, further work-up for an underlying hypercoagulable state is not advised.

Conflict of Interest Disclosures: None

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