



A case with Penile Mondor's disease

Penil Mondor hastalığının izlendiği bir olgu

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Abstract

Mondor's disease (MD) is a rare disorder characterized by superficial thrombophlebitis or subcutaneous venous thrombosis. It is commonly seen on the anterior chest wall. Penile Mondor's disease (PMD) is seen less frequently than thoracic MD and presents as an indurated cord-like lesion along the vein tract. A 47-year-old patient presented to our outpatient clinic with a complaint of a painless, indurated, and sudden-onset lesion on the penis shaft that lasted for 15 days. He was using systemic steroids and antidiabetics for pemphigus and diabetes. He had a cord-like lesion along the penis shaft, becoming more prominent by stretching the skin. He was clinically diagnosed with PMD, regressing spontaneously after 1-week of sexual rest. He denied other triggering factors except for strenuous sexual activity. In this case, we think that diabetic angiopathy and the prothrombotic effect of steroids may have contributed to the development of PMD besides vigorous sexual activity. We found it valuable to share because of its rarity.

Keywords: Mondor's disease, penile Mondor's disease, diabetes, sexual activity, steroid treatment

Öz

Mondor hastalığı (MH) yüzeysel tromboflebit ya da subkutanöz venlerin trombozu ile karakterize nadir bir hastalıktır. Genellikle ön göğüs duvarında görülmektedir. Penil Mondor hastalığı (PMH), torasik MH ile karşılaştırıldığında çok daha nadir görülmekle birlikte venin uzanımı boyunca endüre kord benzeri bir lezyon olarak izlenir. Kırk yedi yaşında erkek hasta, peniste, 15 gündür ağrısız, sert, ani başlangıçlı bir değişiklik nedeni ile başvurdu. Pemfigus vulgaris ve diyabet nedeniyle, düşük doz sistemik steroid ve oral antidiyabetik kullanmaktaydı. Penis shaftında, deri çekildiğinde daha da belirginleşen kord benzeri longitudinal uzanımlı bir lezyon mevcuttu. Klinik olarak PMD tanısı alan hasta, yoğun seksüel aktivite dışında tetikleyici ek bir faktör tanımlamadı. Bir haftalık seksüel aktivite kısıtlanması sonrası şikayetleri geriledi. Bu olguda, yoğun seksüel aktivitenin yanında, diyabetik anjiyopati ve steroid tedavisine bağlı protrombotik etkinin de PMH'nin gelişimine katkıda bulunmuş olabileceğini düşünmekteyiz. Nadir görülmesi nedeni ile, PMH tanısı alan bu olgu paylaşımına değer bulundu.

Anahtar Kelimeler: Mondor hastalığı, penil Mondor hastalığı, diyabet, seksüel aktivite, steroid tedavisi

Introduction

Mondor's disease (MD) is a rare condition characterized by superficial thrombophlebitis or thrombosis of subcutaneous veins¹. It is most commonly seen on the anterior chest

wall, although it can involve other areas, such as the neck, abdomen, and penis². Penile Mondor's disease (PMD) is much rarer than thoracic MD³. It appears as a cord-like and indurated lesion that is palpable along the involved vein tract². Its physiopathology is not exactly known, but vigorous

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sexual activity, trauma, and surgery of the pelvis or external genitalia are the possible triggers considered to be associated. Mostly, it heals within 4 to 6 weeks without any medical treatment⁴.

Case Report

A 47-year-old male patient with pemphigus vulgaris for 13 years presented to our outpatient clinic. He was receiving 4 mg/day systemic steroid treatment for the last four months and 2 mg/day for the past 2 years. He also had type 2 diabetes mellitus and he was on oral antidiabetic treatment. He complained of a sudden-onset, painless, indurated lesion on the penis shaft for 15 days. He had a cord-like, indurated, linear nodule approximately 30 mm x 7 mm in diameter, lying along the lateral distal third of the ventral penis shaft (Figure 1), and the lesion became more prominent by stretching the penile skin (Figure 2). He was clinically diagnosed with PMD. He denied all the possible triggering factors except strenuous sexual activity. A Doppler ultrasonography was planned, but the patient refused the research because he believed it was a benign condition as the lesion was painless. The lesion regressed spontaneously after 1-week of sexual rest. Informed consent was obtained from the patient for the publication of his data on any medical platform accessible by the public.

Discussion

PMD is a rare and self-limited disease, and it can be clinically diagnosed². The first case was defined in 1958, and the reported incidence is 1,39%, although it is believed that there are more under-reported cases^{5,6}. Its pathophysiology is unclear, but a relationship

with Virchow's triad is strongly suspected⁷. Frequent, severe, and prolonged sexual intercourse, prolonged sildenafil use, prolonged sessions position, penile trauma, masturbation, bodybuilding exercises, local (e.g. syphilis, candida infections) or distant infections, history of sexually transmitted diseases, surgeries like repairing of inguinal hernia, varicocele, intracavernous injections, intravenous drug abuse, Behçet's disease, cancer in the pelvic region, and tendency to thrombosis, vaccination or infection of coronavirus disease-2019 (COVID-19), thrombophilia, vasculitis are the possible culprits. Any injury in the vessel wall, stasis, and hypercoagulation known as Virchow's triad may lead to thrombosis^{4,5,7-11}. Clinical findings of our patient and testing results for sexually transmitted diseases were not suggestive of any aforementioned triggering factors except for recent strenuous and prolonged sexual activity history. As it was in our patient, PMD is primarily asymptomatic. Some of the patients complain of pain during erection¹. It appears as an indurated, cord-like lesion that is palpable along the involved vein tract². Diagnosis is easily established by medical history and physical examination as long as it is kept in the mind⁴.

Differential diagnoses of PMD include Peyronie's disease and nonvenereal sclerosing lymphangitis¹. They can be discriminated from each other by clinical findings, but in complex cases, Doppler ultrasonography and histopathology may be required¹. Peyronie's disease is a fibromatous disorder of the tunica albuginea of the penile corpus cavernosum, and it may cause distortions in the shape of the penis, like curving, shortening, narrowing, and painful erections¹². Our patient had no distortion in the penis shape, and he did not complain about pain. As for nonvenereal sclerosing lymphangitis, it is seen as a result of an inflammation of the penile lymphatic vessels, primarily because of trauma during sexual activity¹³. It is a circular indurated lesion located perpendicularly to the penis shaft^{13,14}. It has a translucent appearance when stretched¹³. Our patient had a lesion parallel to the penis shaft and it was more prominent while stretching the skin, therefore, we diagnosed the patient as having PMD. The patient refused the Doppler ultrasonography because he believed that it was and benign and transient condition. He was advised to have a sexual rest, and after a one-week rest, the lesion disappeared completely.

The overall management is limited to supportive care such as pain management, warm compresses, and instructions for abstinence from sexual activity³. Other options are creams containing heparin and anti-inflammatory drugs⁴. Spontaneous resolution is possible, but



Figure 1. The non-stretched appearance of the cord-like lesion seen along the distal one-third of the penis



Figure 2. The stretched appearance of the cord-like lesion along the distal one-third of the penis

thrombectomy may be required in difficult cases^{4,14}. In this case, we thought that diabetic angiopathy and prothrombotic effect of steroid treatment could have contributed to the development of PMD, such as vigorous sexual activity. Even if it's a benign, self-limited condition, we found it valuable to share because of its rarity.

Ethics

Informed Consent: Informed consent was obtained from the patient for the publication of his data on any medical platform accessible by the public.

Peer-review: Externally peer-reviewed.

Authorship Contributions

Surgical and Medical Practices: H.C., Concept: H.C., G.S., İ.M.Y., Design: H.C., G.S., İ.M.Y., Data Collection or Processing: H.C., G.S., İ.M.Y., Analysis or Interpretation: H.C., G.S., İ.M.Y., Literature Search: H.C., G.S., İ.M.Y., Writing: H.C., G.S., İ.M.Y.

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