

Case Reports

Mondor's Disease of the Penis

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Introduction

Penile Mondor's disease is better known as Thrombophlebitis of the penis. The superficial venous thromboses of the chestwall was first described by Mondor¹ in 1939 and later in the penile vein by Braun-falco² in 1955. In 1958 Helm and Hodge³ first described isolated superficial dorsal penile vein thromboses. Mondor's disease is a benign pathology of the dorsal vein of the penis and has no relationship to malignancies or systemic diseases.^{4,5} In most cases the etiology is unknown, various authors have proposed some new etiologies although direct and indirect trauma are known as causative factors.⁶

In this report we present three successfully treated cases and the symptomatology, diagnosis and treatment of Mondor's disease of the penis.

Case Report

Case 1

A 22 years male came with the complaints of red swollen and painful penis after vigorous intercourse since last four days. On examination the superficial dorsal vein of the penis was linear cord like and painful.

Doppler ultrasound examination revealed obstruction of the superficial dorsal vein of the penis. Blood glucose level, blood screening for coagulation defects, ESR, blood urea, serum creatinine and liver function tests were normal.

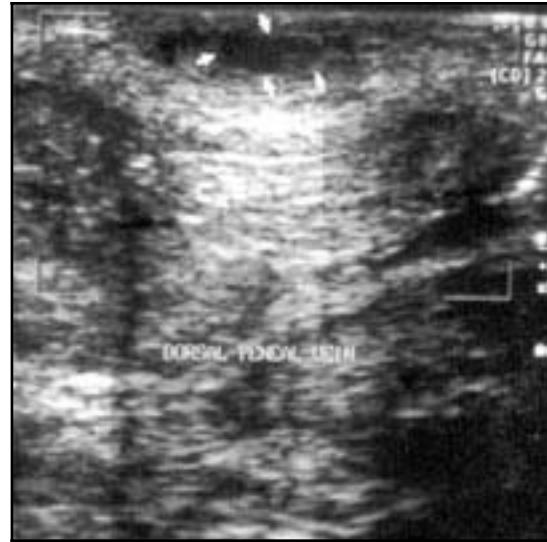


Figure 1. Doppler ultrasound showing thrombus in the dorsal vein of the penis.

Case 2

A 16 years male attended the outpatients department with the complain of penile pain and swelling after masturbation since last 18 hours. He was also giving the history of fever with shivering. On examination the dorsal surface of the penis was red swollen and painful. A cord like superficial dorsal vein of the penis was also palpable and was painful. Doppler ultrasound showed no venous flow in



Figure 2. A 4 Fr tube tried to pass in the blocked dorsal vein of the penis.

the dorsal vein of the penis (Figure 1). Complete blood count showed a total leukocyte count of 13000/cumm. The other laboratory tests such as blood sugar, LFTs and renal function tests were normal. He was treated with tablet Ibuprofen 400mg and capsule Amoxicillin 500mg three times daily for one week. The fever subsided but the swelling and tenderness remained as such. The thrombus from the dorsal vein of the penis was removed under general anesthesia (Figure 2), which showed the obstructed dorsal vein of the penis. The patient was discharged on the same day, the post-operative period was uneventful.

Case 3

A 18 years male developed a sudden painless, cord like induration of the dorsal surface of the penis after high ligation of the left sided varicocele. A cord like superficial dorsal vein of the penis was palpable and slightly painful. Doppler ultrasound showed obstruction superficial dorsal vein of the penis. Routine laboratory investigations were normal. He was treated with tablet Ibuprofen 400 mg three times daily. After 4 weeks of initiating treatment complete resolution of the thrombus occurred and there was free flow of blood on color Doppler ultrasound.

Discussion

Penile Mondor's disease is better known as superficial thrombophlebitis of the penis. It is an uncommon benign disease of the dorsal vein of the penis and in majority of the cases the etiology is unknown. Over the last four decades various authors have proposed some new etiologies, although direct and indirect trauma are known as causative factors.^{6,7} Sexual intercourse trauma is considered as the main etiologic factor.^{5,8,9} This may be due to stretching and torsion of the penile veins causing endothelial necroses, which initiates the release of thromboplastic substances that activate the coagulation cascade.⁶ Such endothelial denudation also facilitates platelet adhesion to the exposed collagen and basement membrane component thus forming a nidus for further thrombus formation. The clinical presentation is usually redness and swelling of the dorsum of the penis accompanied by palpable tender thrombotic vein of the penis.¹⁰ This acute and painful disease frightens the patient who is concerned about his fertility and sexual function.^{9,11} So a proper diagnosis and consequent reassurance can help to dissipate anxiety of the patient with the disease.

Doppler ultrasound is useful both in the diagnosis and follow up of these patients to visualize resolution of the thrombus and restoration of normal blood flow during and after treatment.^{8,9,12,13} In minor cases usually no treatment apart from observation is required. Anti-inflammatory drugs such as Salicylates, Indomethacin and Ibuprofen, used as anti-inflammatory agents have been reported to be effective.^{8,13-19} These drugs reduce the pain and recovery period. In cases of infection antibiotics must be used. The resolution of the thrombus usually occurs uneventfully within four to six weeks. It is also important the patient should

avoid sexual intercourse and masturbation during medical treatment to help healing. In persistent cases either penile vein resection or thrombectomy is recommended^{6,8}, as one of our patients who did not respond to drug therapy, underwent surgery, i.e., dorsal vein resection. Surgery in this type of cases relieves pain and diminishes skin induration and produces aesthetically good results. In the literature and in our own cases there is no report of erectile dysfunction or penile deformity after treatment.

We conclude that Mondor's disease of the penis is a benign, self-limited condition. Anti-inflammatory agents are used for acute discomfort. When indicated vein resection is successful.

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