

Thrombosis of the Dorsal Vein of the Penis (Mondor's Disease): A Case Report and Review of the Literature

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Abstract: Penile Mondor's Disease (Superficial thrombophlebitis of the dorsal vein of the penis) is a rare and important disease that every clinician should be able to diagnose, which present with pain and in duration of the dorsal part of the penis. The various possible causes are trauma, excessive sexual activity neoplasms, or abstinence. Diagnosis is mainly based on history and physical examination. Though diagnosis is mainly based on history and physical examination, Doppler ultrasound is considered as the imaging modality of choice. Sclerotizing lymphangitis and Peyronies disease must be considered in differential diagnosis. Accurate diagnosis and Proper counseling can help to relieve the anxiety experienced by the patients regarding this benign disease. We are describing the symptoms, diagnosis, and treatment of the superficial thrombophlebitis of the dorsal vein of the penis.

Keywords: Mondor's Disease, Penis, Superficial, Thrombophlebitis

INTRODUCTION

Superficial dorsal penile vein thrombosis also known as penile Mondor's disease of the penis, is a rare benign, self limiting condition of the genital affecting the superficial dorsal vein of the penis and present with the superficial, palpable, tender thin cord like lesion in a sexually active male. Though it is a benign condition but can cause anxiety, psychological and emotional trauma to the patient. Though commonly it affect proximal part but can also involve distal part of penile shaft rarely [1].

Though in 1939 Mondore's first described thrombosis of superficial veins of thoraco-epigastric veins [2], it was Helm & Hodgewho first described isolated thrombosis of penile vein [3].

We are presenting a case of superficial thrombophlebitis of the dorsal vein in the penis (Mondor's Disease) with history, physical examination and treatment.

CASE REPORT

A 20-year-old male presented with a history of painful dorsal induration on the proximal third of the penis since oneweek. The pain was aching, which was increasing on erection of penis with positive history of recent masturbation. History of local trauma, excessive

sexual activity, sexual dysfunction, local itching, dysuria, was found to be negative. No significant family or drug history was found.

On Physical examination no significant systemic finding was noted. On local examination a thin superficially palpable, tender, elongated cord like structure was noted his proximal part of dorsal penis. Overlying skin was normal in color and integrity. No significant locally enlarged lymph node was found.

On clinical background diagnosis superficial thrombophlebitis of the dorsal vein of the penis was made. Color Doppler ultrasound showed thrombosis of the superficial dorsal vein of the penis a dorsal induration corresponding to segmental of dorsal induration the superficial dorsal vein of the penis - the rest of the penile veins were normal.

Supportive treatment was given, with systemic (aspirin) and local (heparin cream). Anticoagulant, analgesic (NSAID), antibiotic for 4 weeks. Patient was counseled and was advised to avoid any sexual activity for the given period. On follow up all above described positive finding disappeared, and color Doppler showed normal compressibility of affected vein.



Fig. 1: Ultrasound longitudinal section of the superficial vein of the penis demonstrating thrombosis



Fig. 2: Ultrasound transverse section showing thrombosis of the superficial dorsal vein of the penis



Fig. 3: Ultrasound showing normal superficial dorsal vein of the penis after treatment

DISCUSSION

Superficial thrombophlebitis of dorsal vein of penis is a rare benign self limiting condition, affecting the sexually active male in the age group of 21-70 yrs. old.

Out of various etiological factors, vigorous, traumatic, prolonged & excessive sexual activity play a consistent predisposing factor role [5, 6]. These activity causes endothelial damage and subsequent thrombus formation [7]. Other reported possible precipitants are penile strangulation, venous occlusion, enteroviral infection, prolonged sexual abstinence, neoplasm and abuse of certain intravenous drugs [5, 6]. Sometimes, the thrombosis may occur without a clear etiological factor.

The pathogenesis of the superficial thrombophlebitis of the dorsal vein of penis can be explained by one or more components of Virchow's triad [8].

Patient usually present with throbbing or aching pain on the dorsal aspect of the penis that increases on erection. In some cases may present with dysuria. On local physical examination thin cord like superficially palpable tender structure is noted. Thrombosis may occur close to the sulcus coronaries, in the proximity of penile root and along the entire penile shaft [9].

The diagnosis of the penile Mondore's disease is mainly based on the clinical background (history and physical finding). Color Doppler may be useful in doubtful cases, which will show non-compressible distended vein consistent with the thrombosis [10].

Peyronie's disease and sclerosing lymphangitis should be considered in the differential diagnosis. Peyronie's disease results from thickening of the tunica albuginea and present as a well-defined fibrotic plaque while in sclerosing lymphangitis thickened, dilated lymphatic serpiginous vessels are found [5, 10].

Various methods for the treatment of thrombophlebitis of superficial vein of dorsal vein of penis proposed but none of them has been shown to reduce the duration. Currently palliative treatment with the systemic anticoagulants (Aspirin), locally applicable, anticoagulants cream (Heparin), analgesic, anti-inflammatory (NSAID), and antibiotic are given along with the proper counselling of patient and temporary abstinence from any sexual activity till the thrombosis has completely subsided. Locally Bupivacain 0.5% subcutaneously may be given to patient with acute pain. In most refractory cases venous resection can be effective [5, 9]. Most cases resolve within 4 to 6 weeks.

CONCLUSION

In conclusion Mondore's disease is a benign, self limiting condition of genital, which should be diagnosed by clinician properly. The treatment is palliative. By proper counseling anxiety, and psychological, distress of patients can be relieved related with this benign disease and hence useless over aggressive treatment, physical and emotional trauma can be avoided.

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