

Penile Mass

A previously healthy 48-year-old male presented with a painful penile lump of one week's duration. He denies fever, urinary complaints, rashes, joint pain and other symptoms. The lump was noted 14 hours after sexual intercourse. On examination, he had 3 x 0.5 cm mass at the junction of the glans and shaft on the dorsal portion of the penis (parallel and proximal to coronal sulcus). The mass was tender and firm with no erythema or ulceration. Gadolinium enhanced magnetic resonance imaging (MRI) was obtained to aid in the diagnosis of this mass (Figs. 1 and 2).

The next most appropriate steps are to:

1. Perform laboratory testing for sexually transmitted infections.
2. Treat empirically with doxycycline and then perform laboratory testing for sexually transmitted infections.
3. Treat lesion with cryotherapy (liquid nitrogen).
4. Treat patient with ibuprofen 600 mg; to be given every 8 hours for 2 to 3 weeks.
5. Refer patient for biopsy of this mass.

Discussion

MRI revealed that the mass consisted of thrombosed veins, which is consistent with the diagnosis of penile thrombophlebitis or Mondor's disease. This entity is named after the French surgeon Henri Mondor, who in 1939 described superficial thrombophlebitis in the chest wall. The same entity was described later in the penile veins.

Penile Mondor's disease used to be considered rare but some reports indicate that it may represent about 1% of all patients who present to sexually transmitted disease (STD) clinics.¹ Patients are typically males aged 20 to 50 years. It is believed that endothelial injury caused by friction and trauma during sexual activities triggers the disease process. Histopathological examination reveals absent involvement of lymphatics, prominent blood vessels with plump endothelial cells, thickened blood vessel walls and vessel occlusion with a thrombus.^{1,2}

The precipitating events described in the literature are sexual intercourse, sexual abstinence, urologic instrumentation, recent surgery, inactivity, malignancy, sickle cell disease, thrombophilia; and was also reported spontaneously. Differential diagnosis includes Peyronie's disease and benign and malignant neoplasms of the penis. The diagnostic test of choice is venous Doppler, which shows the classic signs of the absence of Doppler signal in the distal segment of the dorsal vein as well as the inability of the dorsal penile vein to compress secondary to thrombosis. MRI is also diagnostic and can demonstrate the thrombosed veins;



Figs. 1 & 2. Gadolinium enhanced magnetic resonance imaging (MRI) of the pelvis. White arrows point to the distal penile mass and demonstrate thrombosed vascular structures consistent with thrombophlebitis.

however, MRI is more expensive than venous Doppler. The condition is usually self-limiting and can be managed in the realm of primary care. Non-steroidal anti-inflammatories given for 3 to 4 weeks are the mainstay of treatment and are often effective in relieving pain, oedema and restoring Doppler signal. Vein resection or thrombectomy is the treatments of choice for refractory cases.^{1,2}

REFERENCES

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2. Sasso F, Gulino G, Basar M, Carbone A, Torricelli P, Alcini E. Penile Mondors' disease: an underestimated pathology. *Br J Urol* 1996;77:729-32.

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