# Penile Mondor's Disease

Long-Term Functional Follow-Up

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#### **INTRODUCTION**

Penile Mondor's disease is a rare and underdiagnosed entity involving the superficial penile vein thrombosis.<sup>(1,2)</sup> We describe the first case of penile Mondor's disease complicating a bilateral orchidopexy for funiculus subtorsions episodes, with the longest andrological follow-up reported in literature. As this is a very common and worldwide spread surgical operation, urologists must be aware of this clinical condition.

#### **CASE REPORT**

A 19-year-old Caucasian man presented with a rope-like induration on the dorsal surface of the penis. He had an unremarkable previous medical and surgical history with exception for a prior bilateral orchidopexy performed few days earlier on the basis of repeated funiculus sub-torsions episodes. He never experienced a sexually transmitted disease. The patient complained of a local discomfort worsening during erections. He negated sexual intercourse and other sexual activity during the preceding months.

Physical examination revealed a palpable and visible cord-like induration on the dorsal surface of the penile shaft, without evidence of infection, masses comprising the superficial veins, or district lymphadenopathy. Furthermore, a complete hemo-coagulative screening was normal. A penile pulsed color Doppler ultrasonography confirmed an echogenic content within the superficial dorsal vein without flow signals.<sup>(3,4)</sup>

We advised the patient to abstain from sexual intercourse until a complete regression of signs, prescribing an oral nonsteroidal anti-inflammatory drug, ketoprofene 50 mg twice/day, for two weeks.

The clinical picture self-resolved in about a month without sequelae. After 14 years from the first evaluation, the patient came back to our department for an episodic urinary infection, successfully treated with antibiotics. During the revaluation, the physical examination was completely normal. Furthermore, the patient reported the absence of any clinical relapse and a full preservation of erections (International Index of Erectile Function-5 = 25).

## DISCUSSION

The penile Mondor's disease is an infrequent thrombophlebitis of the penile superficial dorsal vein, a self-limiting pathology presenting as consequence of vigorous sexual intercourse, use of sexual vacuum-devices, local injection of illegal substances, pelvic neoplasms, distended bladder, local or remote infections, penile trauma, thrombophilia, or inguinal hernia repair.<sup>(5,6)</sup>

In this report, we describe the onset of a penile Mondor's disease after bilateral orchidopexy. The penile Mondor's disease generally self-resolves in 4 to 6 weeks by thrombus reabsorption, and vein recanalization is described within 9 weeks. <sup>(4,7)</sup> In literature, other conservative approaches are suggested, including a local dressing with a heparin ointment, while use of antibiotics and anticoagulant drugs is not recommended as treatment.<sup>(5)</sup> Only in case of unimproved conditions and persistent discomfort, a thrombectomy or a partial resection of the penile superficial dorsal vein is performed.<sup>(5)</sup>

In our patient, a supportive care was instituted, consisting of temporary abstinence from sexual intercourse and the short-term administration of a nonsteroidal anti-inflammatory drug. The treatment was fully effective and no anatomical or functional sequelae was detectable within a 14year follow-up.

To the best of our knowledge, this is the first reported case of penile Mondor's disease complicating a bilateral orchidopexy. Indeed, a previous

paper reported the onset of such a condition as consequence of an inguinal hernia repair, which occurred after a week from the intervention.<sup>(6)</sup> In our patient, the time-to-onset and recovery was the same, but the previous surgical intervention implied a lowinguinal incision without an inguinal channel violation. Therefore, we hypothesize a possible role of inguinal incision that can be explained as the superficial dorsal vein runs entirely in the subcutaneous district, on an external plane with respect to the Scarpa's fascia, and converge into the right and left external pudendal veins at first, and thence into the omolateral long saphenous vein at the groin. Hence, the local venous drainage equilibrium may be modified by the surgical incision at that level, leading to a consequent thrombotic event.

Leaving out the uncertain pathogenesis not yet clarified, the penile Mondor's disease has remained a benign entity, as demonstrated for the first time by our longest follow-up existing in literature.

### **CONFLICT OF INTEREST**

None declared.

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