## Case Report

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# Acquired idiopathic phlebectasia of the penis: case report

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#### **ABSTRACT**

There is a many example of diseases of blood vessels involving serious diagnostic difficulties and sometimes the etiologic factors may be only presumed. Varicose veins rarely affect the penis, and we were unable to find in dermatologic and urologic literature reports of a similar case. We report here a case of a 26-year-old man with a history of a penis getting bigger since his adolescent life associated with minor pain, discomfort, and a primitive erectile dysfunction. After a complete medical history, physical examination and ultrasonic doppler color investigation, the diagnosis of acquired phlebectasia of the penis was confirmed. The patient was treated surgically by ligaturing and section of the voluminous dorsal varicose veins of the penis and reducing the ventral scrotal skin, with successful aesthetic and functional results, with a follow up more than 3 months. Varicose veins of the penis are an exceptional pathology. This condition may not need any treatment. However, when varicose veins cause great discomfort, pain, aesthetic or sexual issues, surgery is the best option of the patient.

Keywords: Penis, Idiopathic, Phlebectasia, Primitive erectile dysfunction

#### **INTRODUCTION**

Varicose veins are enlarged veins that most often appear due to unusually high pressure on the veins, most usually on the thighs, ankles and feet. Varicose veins are very common, affecting about 30% of people at some point in time. They generally become more common with age. Varicose veins rarely affect other parts of the body as well as genitals for reasons not clearly understood.

The exact pathophysiology is unknown. It involves a genetic predisposition, incompetent valves, weakened vascular walls, and increased intravenous pressure.

Here, we present an extremely rare case of an isolated varicose veins of the penis.

Through this observation, we will discuss the diagnostic and therapeutic aspect of this rare pathology.

### CASE REPORT

A 26-year-old non-married man, was referred to our urology department with a history of progressive increase of his penis volume, since his adolescent life associated with minor pain, discomfort and primitive erectile dysfunction. The patient had not consulted any physician for fear of an unfavorable prognosis or of an operation. No other vascular changes were visible elsewhere on his body.

On physical examination, the patient is examined in the standing position, and the penis is visually distended at its dorsal and distal part, with dilated subcutaneous veins following the course of the venous branches of the shaft. Visually the glans is normal with no nodules or other anomalies. Figure 1 A and B the palpation finds a large and thickened mass like a bag of worms, and normal cavernous tissue.

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Clinical examination and routine laboratory findings showed no pathologic alterations. we found no vascular diseases in relatives. The doppler examination of the penis and the spermatic cord, showed a thickening of the subcutaneous tissue of the dorsal and distal part of the penis measured at 10 mm with significant dilation of the subcutaneous venous plexus, without deep or superficial dorsal vein thrombosis. No arterial abnormality or testicular varicocele was found. Figure 2 direct phlebography of the penis was not possible because of a history of contrast agent systemic reaction. Computed tomographic scan failed to reveal any abdominal, pelvic, or testicular change or any compression on large vessels.

The diagnosis of isolated superficial penis phlebectasia was finally retained. After the consent of the patient, a surgical approach was decided, with a locoregional anesthesia. We perform a semicircular aesthetic incision at the dorsal level of the penis until the Buck's fascia, then we start a careful dissection of the voluminous varicose veins of the penis, in contact with albuginea. Figure 3 A and B The ligature section the mass in both right and left side using an ultrasonic ligature was done successfully, with a satisfied hemostasis control. A reduction of the dorsal scrotal skin was also done for an aesthetic purpose and to reduce the physical discomfort.

The excision peace was sent for a histopathological examination which showed numerous vascular sections, dilated veins engorged with red blood cells confirming the diagnosis of venous phlebectasia or varicose veins of the penis. The patient left the hospital next day, only with analgesic treatment, and he was controlled in a follow- up visit 15 days later with good healing. Three month later, the patient affirmed that he resumed his sexual activity without any problem or discomfort.

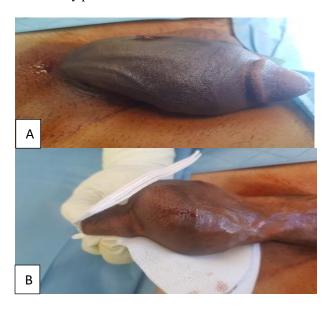


Figure 1: (A and B) The penis is distended at its dorsal and distal part, with dilated subcutaneous veins following course of venous branches of the shaft.

Visually the glans is respected.

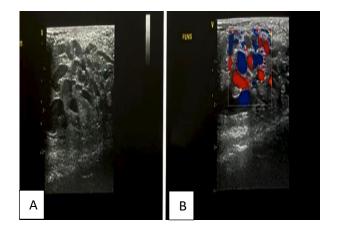


Figure 2: Sonography and doppler examination of the penis, showed a thickening of the subcutaneous tissue of the dorsal and distal part of the penis measured at 10 mm with significant dilation of the subcutaneous venous plexus, without deep or superficial dorsal vein thrombosis.

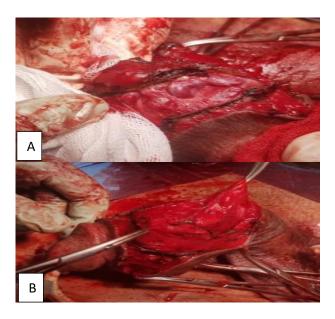


Figure 3: (A and B) Dissecting and exposition of the voluminous varicose veins of the penis.

#### DISCUSSION

The exact pathophysiology of varicose veins of the penis is unclear. This is not associated with clots of the deep veins in the legs or any other significant medical condition. it could involve a genetic predisposition, incompetent valves, weakened vascular walls, and increased intravenous pressure leading to thickening of the vein or eventual fibrosis. Also, prolonged sitting could be a hypothetical factor giving this condition. It is not known to be related to masturbation or sexual activity. Varicose veins may be primary or secondary. Primary varicose veins occur in the absence of any venous shunts have been claimed to aggravate the condition. Also, inheritance may play a role and a congenital absence of valves has been supposed. In fact,

an abnormal weakening of the valve commissures has been found.<sup>2</sup>

Penile varicose veins have not been extensively studied and so there is little information about their health effects and treatment.<sup>1</sup>

The interesting factor in this case the unusual location of the varicosity. Only in three instances, one congenital and two acquired cases was reported in the world, to be affected by varicosities. In one case, it was about a 40-year-old Italian man presenting varicosities in the shaft of the penis for whom no treatment was done because of his non-consent.<sup>3</sup>

In the other two cases, the glans penis was involved and not the shaft.<sup>4</sup> In our patient the glans was normal, while varicosities followed the course of the venous branches of the shaft. Their occurrence in adolescent life, their absence at birth, and the normality of laboratory findings account for the title of primary acquired varicose veins of the penis.

The diagnosis is usually established on the basis of good history, clinical examination, and investigations like non-invasive color doppler ultrasonic.<sup>5</sup>

It is considered a benign situation, but it may cause some minor pain or discomfort or sometimes some difficulties during sexual acts. Rarely, it can be much more severe and involve if the deep venous system is affected. The use of condom and lubricant is recommended to avoid bruising the vein and irritation.

The Doppler ultrasonic is helpful to confirm the diagnosis and also to eliminate differential diagnostics such as lymphangio-sclerosis, a thickening of the lymphatic vessel.<sup>5</sup>

This condition may not need any treatment. Treatment is offered when varicose veins cause great discomfort, pain, or sexual issues, like the case of our patient.<sup>5</sup>

In the absence of a similar case in the literature, the surgery is based on resection of the dorsal penile varicose veins using an ultrasonic ligasure, and on reducing the ventral scrotal skin through an aesthetic semicircular incision to reduce the pressure and the physical discomfort. The surgery is followed by the histopathological study to confirm the diagnosis of phlebectasia and to rule out any congenital abnormality of the veins.

#### **CONCLUSION**

Varicose veins of the penis are an exceptional pathology. The diagnosis is simple, based on clinical examination, and confirmed by doppler ultrasonic. This condition may not need any treatment. However, when varicose veins cause great discomfort, pain, aesthetic or sexual issues, like the case of our observation, surgery based on dissecting and ligating using ligature is the best option of the patient.

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