CASE REPORT

Surgical Management of Spontaneously Thrombosed Extratesticular Varicocele Presented with Irreducible Inguinal Swelling: A Case Report

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ABSTRACT

Varicocele is a relatively common condition that is mostly studied because of its effects on the testes and presumed role in infertility. A varicocele is caused by dilatation of the pampiniform plexus of the spermatic veins. Spontaneous thrombosis of a varicocele is a rare event and difficult to diagnose, as the clinical symptoms during the acute phase can simulate torsion of the spermatic cord leading to a useless surgical exploration. We present a case of varicocele thrombosis presented with irreducible inguinal swelling, which was initially misdiagnosed as incarcerated inguinal hernia. Doppler ultrasonography revealed thrombosed left varicocele that did not respond to conservative treatment and was managed surgically.

Key words: Varicocele, Inguinal hernia, Thrombosis, Complication

OZET

Redükte Edilemeyen İnguinal Şişlik ile Gelen Spontan Tromboze Ekstratestiküler Varikoselin Cerrahi Tedavisi: Olgu Sunumu


Anahtar kelimeler: Varikosel, İnguinal hemi, Tromboz, Komplikasyon
CASE REPORT

We present the case of a 24-year-old unmarried Indian male, who was a laborer by profession. He was admitted to our hospital from the Emergency Department complaining of left groin pain and swelling. The condition had started three days before with moderate-in-severity dull, aching pain in the left groin. While the severity and frequency of the pain had increased in the last one day, the groin swelling showed no change in size. This pain was non-radiating, not related to meals, did not respond to over the counter analgesics, and was not associated with anorexia, nausea, vomiting, fever, or weight loss. He reported no change in his bowel habits and no urinary symptoms. There was no testicular pain or tenderness. He denied any history of left inguinal swellings or hernia. The patient has no history of surgeries, chronic illness, allergy, or trauma and no special habits. Physical examination was significant only for marked left inguinal tenderness and left inguinal swelling of about 6 x 5 cm, firm to hard, tender, tense, irreducible, and with no impulse on cough. Scrotal examination revealed no testicular tenderness or asymmetry. Laboratory reports were within normal limits. Initial clinical diagnosis was incarcerated left inguinal hernia. Ultrasonographic examination confirmed the diagnosis of left thrombosed varicocele with no testicular pathology. The patient was admitted to the hospital. Conservative management was initiated in the form of Daflon 500 mg, 2 tablets every 8 hours, non-steroidal anti inflammatory (Voltaren, diclofenac sodium 75 mg intramuscular injection every 12 hours) and bed rest for 48 hours, but the patient did not respond well, as the pain worsened and the swelling increased in size and became more tense and tender. Surgical intervention was decided, and the patient consented to and was prepared for surgery. Left inguinal incision was done. There was a firm-to-hard swelling inside the spermatic cord at the external inguinal ring. Careful dissection of the cord structures revealed firm, irregular, mostly localized vascular malformation of the spermatic cord veins about 6 cm in length starting at the external inguinal ring and extending retroperitoneally parallel to the vas deferens. The proximal spermatic veins were dilated. A significant retroperitoneal lymph node, adjacent to the swelling, was taken for pathological examination. While no indirect hernial sac was found, the posterior wall of the inguinal canal was weak. Complete excision of the mass was performed. Plication of the fascia transversalis and fixation of Prolene mesh were done. Histopathology examination revealed dilated and prominent blood vessels with thrombosis and inflammation in the surrounding fibroadipose tissues. The excised lymph node showed sinus hyperplasia (sinus histocytosis). The postoperative period was uneventful with good recovery. He was discharged home after two days. Follow-up bilateral inguinal sonography after three weeks revealed no abnormality.

DISCUSSION

Varicoceles are found in about 10 to 15% of healthy males and in an even higher percentage of infertile men[1]. Left-sided varicoceles are 10 times more common than right-sided varicoceles, perhaps because of anatomic variations that lower blood flow in the left spermatic vein[2]. Bilateral varicoceles occur in 33% of patients. Unilateral right varicoceles are very rare and should alert the clinician to a possible underlying pathology causing inferior vena caval (IVC) obstruction (renal cell carcinoma with IVC thrombus, right renal vein thrombosis with clot propagation down the IVC, etc.), since the right gonadal vein directly empties into the IVC. Varicoceles may be asymptomatic or may cause dull, aching left scrotal pain (typically noticeable when standing and relieved by recumbency), testicular atrophy (believed to be secondary to loss of germ cell mass by induction of apoptosis-programmed cell death-initiated by the associated slightly increased scrotal temperature), and possibly compromised fertility[3]. The differential diagnosis of hypoechoic lesions in the testes includes intratesticular cysts, tubular ectasia of rete testis, hematoma, focal infection, and (rarely) cystic intratesticular neoplasm. These lesions will not show venous flow on color Doppler ultrasound, and a negative response to Valsalva’s maneuver helps in differentiation from intratesticular varicocele[4-6]. The higher sensitivity and specificity of Doppler examination compared with thermography and angiography, as well as its low cost and noninvasiveness, make this the procedure of choice in the diagnosis of venous reflux in varicocele[7]. Spontaneous thrombosis of a varicocele is a rare event and difficult to diagnose, as the clinical symptoms during the acute phase can simulate torsion of the spermatic cord or strangulated inguinal hernia, leading to a useless surgical exploration[8]. Kleinclauss et al. reported a case of spontaneous thrombosis of a varicocele that was diagnosed...
clinically, allowing conservative medical treatment[9]. In our case, the conservative management failed, necessitating surgical excision of the thrombosed varicoceles.

CONCLUSION

Spontaneous thrombosis of varicocele is a difficult clinical diagnosis and requires a high index of suspicion and good Doppler ultrasonographic examination. If properly diagnosed, the condition can be treated conservatively, avoiding unnecessary operation.

REFERENCES


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