A rare indication for scrotal exploration

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INTRODUCTION

The adductor longus muscle occupies the medial myofascial compartment of the thigh. The muscle originates from the pelvis and inserts on the femur. It serves as an adductor of the thigh and an important stabilizer of the pelvis and works to maintain a balance of the pelvis on the lower limb during gait.

An acute rupture of the adductor longus is rarely seen and mostly affects (semi-) professional sportsmen.[1-3] In the available literature, there is no description of cases of adductor longus rupture due to rehabilitation exercises in patients with spinal cord injury.

This clinical case is unique because this pathology is relatively rare and can mimic the acute scrotum.

CASE REPORT

A 33-year-old man (patient consent form has been obtained) came to the emergency room with rapid onset, dark color selling in the right part of the scrotum. He had a spinal cord injury to the cervical spine 10 months earlier, following which he was undergoing rehabilitation exercises. The swelling was asymptomatic and was noticed during nursing. He had no history of groin pain or similar problems earlier.

On physical examination, the right half of the scrotum was enlarged, the skin was dark crimson and smoothening of the scrotal rugae was noted. The testicle was not palpable due to the swelling. The left half of the scrotum was normal size, and a normal testicle was palpated.

Ultrasound (US) imaging in the emergency room revealed a right sided hematocoele and it was assumed to be due to partial torsion of the right testicle. As there was a suspicion of hematocoele and partial rupture of the right testicle, surgical exploration of the scrotum was done. The hematoma was evacuated and, in the lateral upper part of the scrotum, a mass of soft elastic consistency was noted which was then identified to be muscle [Figure 1]. In the medial part of the scrotum, there was an intact testicle of normal size [Figure 2].

During the operation, after the discussion with traumatologists, complete muscle rupture was diagnosed. The proximal fragment of the muscle was ligated and separated from the pubic bone and removed. After complete hemostasis, the surgical wound of the scrotum was sutured. After 6 days, the patient was discharged from the hospital.

DISCUSSION

Acute ruptures are painful injuries, and despite having

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preserved sensation in his lower extremities, our patient did not feel any pain. The patient’s parents accidentally discovered a hematoma in the scrotum during cleaning. Traumatic injury of the testicle with the subsequent hematoma formation was suspected during the primary patient examination. High-frequency US with a linear array transducer is the modality of choice for investigating suspected testicular trauma. When compared to surgical findings, the sensitivity and specificity of ultrasonography in blunt testicular trauma are 100% and 93.5%, respectively.[4]

US imaging in the emergency room did not reveal any sign of testicular rupture and there was no interruption of the tunica albuginea or change in contour or extrusion of seminiferous tubules. However, it revealed decreased blood flow and hematoma formation in the upper part of the scrotum. Injury of the testis leads to a loss of vascularity to a portion or the entirety of the testis. Assessment of testicular vascularization is very important and helps to assess its viability and feasibility of saving the testis. Hematoma, suspected traumatic testicular torsion, or trauma of spermatic cord was one of the reasons for the surgical exploration of the scrotum. In retrospect, considering that there were no signs of testicular rupture and no signs of a hematoma under the tunica vaginalis on US imaging, surgery could have been avoided using computed tomography or magnetic resonance imaging of the pelvic segment scans. In case a preoperative diagnosis could have been made, a surgical exploration could have been avoided.

Other indications for scrotal exploration include uncertainty in diagnosis after appropriate clinical and radiographic evaluations, clinical findings consistent with testicular injury, disruption of the tunica albuginea and absence of blood flow on sonograms with Doppler studies.[9]

In conclusion, urologists should be aware of such a rare condition such as adductor longus rupture masquerading as a case of acute scrotum.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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REFERENCES
1. Akermark C, Johansson C. Tenotomy of the adductor longus tendon in the treatment of chronic groin pain in athletes. Am J Sports Med 1992;20:640-3.
2. Schlegel TF, Bushnell BD, Godfrey J, Boublik M. Success of nonoperative management of adductor longus tendon ruptures in National Football League athletes. Am J Sports Med 2009;37:1394-9.
3. Feeley BT, Powell JW, Muller MS, Barnes RP, Warren RE, Kelly BT. Hip injuries and labral tears in the National Football League. Am J Sports Med 2008;36:2187-95.
4. Buckley JC, McAninch JW. Use of ultrasonography for the diagnosis of testicular injuries in blunt scrotal trauma. J Urol 2006;175:175-8.
5. Morey AF, Brandes S, Dugi DD 3rd, Armstrong JH, Breyer BN, Broghammer JA, et al. Urotrauma: AUA guideline. J Urol 2014;192:327-35.

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