



Case report

Successful manual detorsion of testicular torsion in an elderly patient: A case report

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ABSTRACT

Introduction: Testicular torsions in elderly individuals are rare occurrences that are often managed surgically.
Case presentation: We present the first reported case of a successful manual detorsion in a 70-year-old male patient, resulting in clinical and radiological improvement.
Clinical discussion: In this case report we discuss the role of manual detorsion alone in elderly without the need for surgery.
Conclusion: Observation of our patient for 24 h post-detorsion ensured stability before discharge.

1. Introduction

Testicular torsions are urological emergencies that require immediate attention and management. A testicular torsion occurs when the spermatic cord twists around itself interrupting the blood flow to the testicles. This could cause serious complications such as testicular ischemia and sexual dysfunction [1]. This urgent presentation is typically managed surgically. In elderly patients, surgical intervention is favored to salvage the testis [2]. We report a unique case of manual detorsion in an elderly patient, yielding clinical and radiological improvement without surgery. To our knowledge this is the only case of testicular torsion in an elderly patient to be managed without the need for surgical intervention.

2. Case presentation

This is a case report of a 70-year-old male patient known to have diabetes mellitus, hypertension, dyslipidemia, and ischemic heart disease, and surgically free. Patient presented to the emergency department complaining of left testicular pain that started suddenly awakening him from sleep at 11 am. He was worried about his acute pain and decided to visit the emergency department immediately. The patient denied any history of lower urinary tract symptoms or testicular trauma. Vitals signs were stable with no fever. Upon physical examination, the left testis was grossly overlying, and slightly erythematous, and on palpation it was

severely tender. On the other hand, the right testis was looking normal. Cremasteric reflex was absent in left side, and present in the other side. Blood investigations were unremarkable, and all inflammatory markers were normal. A testicular ultrasound was conducted, which revealed complete absent vascularity in the left testicle on color Doppler, concerning for left testicular ischemia that could be secondary to torsion (Fig. 1) The right testicle showed normal size and preserved vascularity. After the patient received morphine 4 mg subcutaneously, testicular pain partially improved. At around 3 pm, manual detorsion was tried by rotating the affected testicle laterally around 360 degrees while observing the patient, the patient felt immediate relief after. Testicular ultrasound was repeated and revealed returned of vascularity (Fig. 2). Patient was admitted for observation for 24 h and was discharged second day in a good condition with outpatient appointment to arrange for elective orchidopexy. Our case has been reported in line with the SCARE criteria [1].

3. Discussion

Testicular torsions in the elderly are rare with very few cases reported worldwide in the past 20 years. Patients reported in these cases presented with similar symptomatology, testicular pain and swelling for several days with no history of traumas. All these cases were surgically intervened on [3–5]. Testicular torsions predispose the testicles to ischemic injury or necrosis. The etiology behind testicular torsions is

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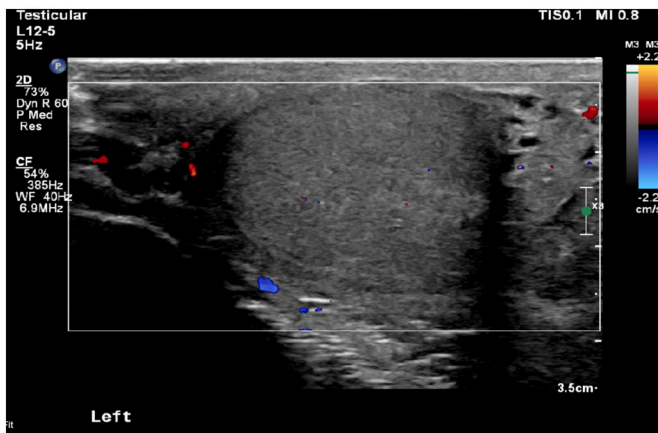


Fig. 1. Left testis ultrasound on presentation to the Emergency Department.

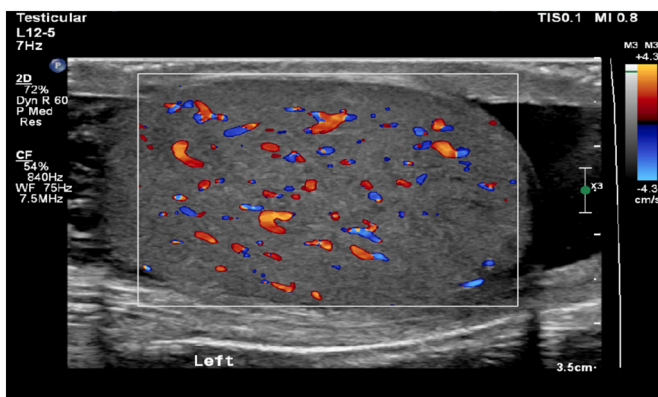


Fig. 2. Left testis ultrasound post-manual detorsion.

usually due to a congenital patent tunica vaginalis since it most commonly occurs in pediatrics and adolescents. However, in elderly cases it has been found to be usually concurrent with testicular malignancy [6]. Testicular torsions are typically managed surgically by either orchidopexy to prevent recurrence or orchidectomy in cases of non-salvageable testis.

Manual detorsion is the process of untwisting the testicle in a lateral fashion to salvage the testis from ischemic injury. The success of manual detorsion technique is measured both by immediate pain relief and returned vascularity on Doppler ultrasound. Although the role of manual detorsion in the elderly is not fully established, high success rates in the pediatric population is shown [7]. For instance, one study investigating the effectiveness of manual detorsion showed that out of 72 attempted detorsions, 58 attempts yielded a safe successful treatment [8]. This result was furthermore supported by another study that had similar positive results, with 20 successful manual detorsions out of a total of 26 patients [9].

Manual detorsion alone has not been solely depended on when managing testicular torsions. Surgical interventions, such as orchidopexy or orchidectomy, are usually carried along to prevent any recurrences or complications. Brungardt et al. found that no significant results are found between managing the torsion either with orchidopexy or orchidectomy [10]. In a study conducted to evaluate the effect of manual detorsion on testicular salvage rates in adults, manual detorsion was considered successful in 36 (58.1 %) patients and unsuccessful in 26 (41.9 %) patients, out of a total of 62 patients included [11]. On the other hand, a study conducted by Mejdoub et al. revealed that in comparison to the younger population, adults scored much lower rates of salvation [12]. This was theorized to be due to delayed more

pronounced testicular torsion presentations in the elderly [2]. As discussed, no role of manual detorsion as the sole management has been quite established in the elderly population. The case of our patient demonstrates successful management without surgical intervention, supported by immediate pain relief and improved vascularity.

4. Conclusion

In conclusion, manual detorsion yielded effective results in the management of testicular torsion. This offers a safe alternative approach to surgical procedures in managing salvageable testicular torsions. Limited data exist on torsion recurrence rates in elderly patients, warranting further research.

Informed consent

Written informed consent was obtained from the patient for publication and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal on request.

Ethical approval

Ethical clearance was not required as it is a single case being reported. We usually submit proposals to KAIMRC for ethical clearance of research projects (case series and/or study designs including many patients).

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CRediT authorship contribution statement

Leen Alghamdi: Conceptualization, Writing – original draft, resources. **Abdullah Alghamdi:** Conceptualization, Writing – original draft. **Faisal Alsenani:** Writing – review & editing. **Abdullah Mesawa:** Conceptualization, Writing – review & editing, supervision.

Declaration of competing interest

None.

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