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Urology Case Reports 16 (2018) 12–13

Contents lists available at ScienceDirect

Urology Case Reports

journal homepage: www.elsevier.com/locate/eucr

Case of an Airsoft pellet induced epididymal laceration and secondary testicular torsion with the loss of affected testis

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ARTICLE INFO

Article history:
Received 20 August 2017
Received in revised form
14 September 2017
Accepted 26 September 2017
Available online xxx

Introduction

Testicular torsion is one of the conditions where clinical diagnosis requires an high index of suspicion. A wide variety of symptoms, clinical signs and scoring systems have been proposed. In the setting of testicular trauma, size of the haematoma and integrity of tunica albuginea is of crucial importance in determining whether surgical intervention is necessary.[1] However, testicular torsion is present in some of these cases which can be missed delaying the diagnosis and resulting in testicular loss.[2] We present first reported case in which blunt testicular trauma from Airsoft gun resulted in epididymal laceration and testicular torsion with the loss of testis.

Case report

A 26-year old man was hit by a stray pellet of an Airsoft gun. He attended accident and emergency department of University College Hospital Galway after a 6 day history of non-resolving right sided scrotal swelling. He was clinically stable and minimally tender over the right hemiscrotum which showed obvious signs of swelling and erythema. Cremasteric reflex was absent and contralateral testis was normal. Spermatic cord on the ipsilateral side was thickened. An urgent ultrasound scan with doppler flow studies was carried out which showed absent blood flow to the affected testis with sonographic intratesticular changes, a haematocele and an abnormal epididymis Fig. 1. Scrotal exploration was carried out that showed laceration of the body of epididymis and a non-viable right testis which had suffered complete, intravaginal testicular torsion

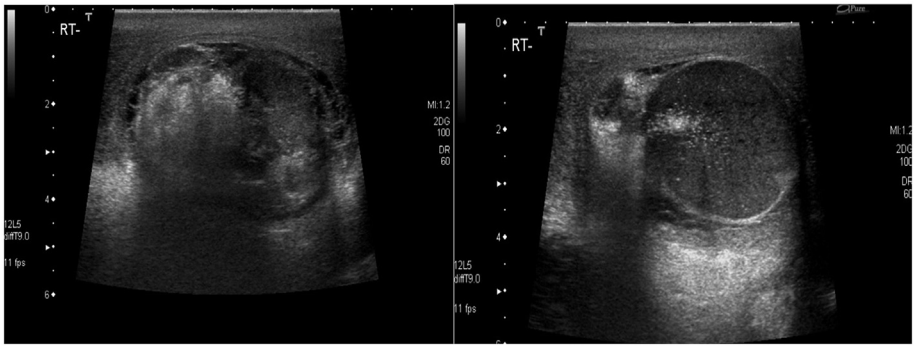

Fig. 1. Echogenic right testis with no blood flow, surrounding fluid and compromised epididymis.

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https://doi.org/10.1016/j.eucr.2017.09.014

Fig. 2. Ischemic right testis with lacerated epididymis and twisted spermatic cord.

Fig. 2. There was minimal surrounding haematoma. Orchidectomy was performed and on the contralateral side orchidopexy was carried out. Following uneventful postoperative recovery, he was discharged home 24 hours later.

Discussion

Traumatic torsion is an infrequently reported entity and may result in delay in diagnosis.[2] In our case, the diagnosis of testicular torsion was made on sonography. Patient presented late since he initially attributed the swelling to a minor injury which later became progressive that made him seek medical attention.

Airsoft gun is a type of air gun that uses pneumatically driven mechanism to discharge a plastic pellet 6–8 mm in size capable of reaching muzzle velocity of greater than 300ft/sec.[3] Air guns can cause serious injuries and in some reported cases can be fatal.[4]

With testicular trauma, testicular rupture has been emphasized upon and guidelines advocate conservative treatment with exceptions being a large haematoma more than 3 times the size of contralateral testis, disruption of tunica albuginea or testicular dislocation.[5]

This is the first reported case of an Airsoft pellet induced epididymal laceration and secondary testicular torsion with the loss of affected testis. In literature one reported case of epididymal laceration with concomitant testicular torsion in a boy falling down a chair has been described before.[2]

Ultrasound scan with Doppler flow studies is an excellent tool which can be employed to assess the integrity of the affected testis but if there is suspicion of testicular torsion then early scrotal exploration is warranted as any delay will lead to increased risk of testicular loss.

In the guidelines, because of scarcity of the cases there is no definite consensus on the need for or timing of contralateral orchidopexy. Testicular torsion should always form part of the differential diagnosis when dealing with cases of testicular trauma.

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