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<http://www.pediatricurologycasereports.com>**Unilateral testicular torsion following ejaculation by manual sexual stimulation in an adolescent: A case report****Omer Faruk Yagli¹, Ali Gokkaya²**¹Department of Urology, Tuzla State Hospital, Istanbul, Turkey²Faculty of Medicine, Department of Plastic Surgery, Abant Izzet Baysal University - Bolu, Turkey**ABSTRACT**

Testicular torsion is one of the most common causes of acute scrotum in children and adolescents. The bell-clapper deformity, which detected in 12% of males, is the most important reason that leads to testicular torsion. In our case, a 14 years old male admitted to our clinic due to testicular torsion developed after ejaculation with manual sexual stimulation of the penis. The most important criteria in determining the loss of testis is the degree and duration of torsion. Here, we discussed the rare cause of testicular torsion along with diagnostic and therapeutic characteristics.

Key Words: Testicular torsion; masturbation ejaculation; adolescent.

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Introduction

Testicular torsion often occurs in childhood. It is a surgical emergency that characterized by decrease in blood flow to the testes due to spermatic cord torsion. Edema and erythema develop in the testis and scrotum in the patient's clinic [1]. While spermatogenic cells in the testis are affected by ischemia, the Leydig cells are more resistant to ischemia. Irreversible ischemic damage to the testis may develop within the first 4 hours after torsion of the spermatic cord [2]. The degree of torsion

seems to have a significant effect on testis viability depending on time. Early diagnosis and intervention prevents irreversible changes that can occur in the testis [3]. Although etiology of testicular torsion is accused of acute exercise and cycling, spontaneously develops in the majority of cases. In addition, manual sexual stimulation or masturbation is a risk factor for the development of testicular torsion, but it is often not noticed [4]. Here we discussed the rare cause of testicular torsion along with diagnostic and therapeutic characteristics

Case report

A 14 years old male patient admitted to our clinic with nausea, vomiting, and left testicular pain. We learned from the history of the patient

that the testicular pain was occurred after ejaculation with manual stimulation. On physical examination, left testis was hard, and tender, enlarged and painful with scrotal elevation. A color Doppler ultrasonography performed with a prediagnosis of testicular torsion showed that blood flow was absent in the affected testicle. The patient underwent emergency operation [Fig. 1].



Fig. 1. Intraoperative appearance of the testicular torsion.

After detorsion, the testicular incision showed that there was blood in the testis. Left testis fixation was performed. Testicular blood flow was naturally observed in the Doppler ultrasonography taken 24 hours after the operation.

Discussion

Spermatic cord torsion is a rare disease and often seen in adolescent males. Sudden scrotal pain constitutes the classic clinical picture of spermatic cord torsion. However, in some children the pain may be less and the onset may be slower [5]. In addition to scrotal pain, scrotal volume increase, scrotal skin redness, lower abdominal pain, nausea and vomiting

may occur [6,7]. The absence of cremasteric reflex is an important finding for torsion [8].

The differential diagnosis includes trauma, epididymitis/epididymal orchitis, testicular appendage torsion, varicocele, acute hydrocele, inguinal hernia, testicular tumors and Henoch-Schönlein purpura. The other helpful findings in the diagnosis is the change in the pain with the elevation of the testes called 'Prehn findings'. Torsion pain increases after testicular elevation. At present, scrotal color Doppler ultrasonography is used in the diagnosis together with anamnesis and physical examination [9]. However, radionuclide imaging can be performed [10]. If torsion correction is achieved within the first six hours, the testis function is almost preserved. After 12 hours, this rate decreases to 20%. If it is longer than 24 hours, irreversible changes occur in the testis. As a result, testicular torsion requires immediate diagnosis and treatment. Successful results usually occur if intervention is made within the first 4-6 hours. Within the first six hours after the onset of the event, all of the treated testicles were recovered, but only 50% of the test results were successful after 6-12 hours of treatment [11].

The most important cause of testicular torsion is bell-clapper deformity. Tunica vaginalis completely surrounds the testis, epididymis and the distal part of the spermatic cord. It is found in 12% of men. The other common causes are trauma and increased testicular volume. Intravaginal testicular torsion is seen in patients with Bell-clapper deformity and 80% of these patients have the same deformity in the opposite testis. For this reason, it is absolutely necessary to fix the other testis during the operation [12]. Another type of testicular torsion is the extravaginal torsion seen more frequently in the neonatal period.

The entire funiculus turns together with the testis and the gubernaculum [13]. As mentioned above, anatomical abnormalities and cremasteric contractions during ejaculation may cause torsion by rotating the testes medially [4], like in our case. Therefore, the masturbation should be kept in mind as a reason of testicular torsion in adolescence period.

Compliance with ethical statements

Conflicts of Interest: None.

Financial disclosure: None.

Consent: All photos were taken with parental consent.

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