Case Report

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Simultaneous Bilateral Testicular Torsion in the Adolescent

Y.	Yukio	Osada
T.	Toshifumi	Tanada
N.	Nobuyuki	Ishisawa

Department of Urology, Miyazaki Medical College, Miyazaki, Japan

Key Words

Bilateral testicular torsion
Adolescent
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Abstract

A rare case of simultaneous bilateral testicular torsion in a 12-year-old boy is reported. Although an acute scrotal emergency of unilateral testicular torsion is not uncommon, bilateral testicular torsion, synchronous or asynchronous, is rare.

Yukio Osada, MD, Department of Urology, Miyazaki Medical College, Kiyotake-cho, Miyazaki 889-16 (Japan)

Case Report

A 12-year-old boy was admitted with bilaterally painfully enlarged testes of 60 h duration. The pain first occurred suddenly in the left testis and, several hours later, in the right. There was no history of trauma or lower urinary tract symptoms.

Physical examination revealed a darkish-red edematous scrotum and bilateral markedly swollen testes. The patient was afebrile. White blood count was 12,300 and urinalysis revealed no pyuria.

Fig. 1. Findings at operation, showing bilaterally infarcted testes.

The Doppler ultrasonic flow meter unexpectedly made the sound of blood flow in the scrotum audible.

The patient underwent immediate surgical exploration through a bilateral inguinal incision, which revealed a 360° clockwise torsion of the right testis and the same degree counterclockwise torsion of the left, intravaginally. Torsion was reduced but no evidence of return of blood supply

to the testes was observed (fig. 1). Due to the bilateral torsion, orchiectomy could not be done, but orchidopexy was performed.

Testosterone determination showed a markedly low value and the levels of luteinizing and follicle-stimulating hormones were high 1 week after the operation. These abnormal values have persisted for more than a year. Although both testes were palpable a year after the operation, a marked decrease in testicular size was observed bilaterally. Exogenous androgen therapy to attain secondary sex characteristics is planned.

Discussion

Testicular torsion is a well-known urologic emergency and, therefore, accurate diagnosis and prompt surgical exploration is necessary.

The duration between the onset of symptoms and the time of surgical detorsion is obviously of paramount importance to testicular viability. Exploration is urgent in the patient with acute testicular pain and swelling, unless an accurate diagnosis of some other testicular mass such

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as epididymo-orchitis, testicular tumor, traumatic hydrocele or strangulated hernia is performed immediately.

Williamson [1] reported that after 10 h the chances of testicular survival are slim unless either spontaneous reduction occurs or the degree of twist is limited to 180–360°. As in our case, delayed management of bilateral testicular torsion leads to loss of hormonal production and spermatogenesis.

In most previous reports of unilateral testicular torsion, it has been emphasized that contralateral exploration and prophylactic orchiopexy are mandatory because of the bilaterality of the congenital deformity leading to torsion [1–3]. With similar data, Krarup [4] and Bartsch et al. [5] have shown that fertility in patients with unilateral testicular torsion is reduced. The patients treated for unilateral testicular torsion seem to have bilateral testicular abnormality resulting in decreased spermatogenesis. Simultaneous bilateral testicular torsion in a neonate has also been described previously [6, 7]. Wasnick et al. [8] were the first to report a case of simultaneous bilateral testicular torsion in a man [8]. Actually, the incidence of bilateral testicular torsion is not so high, probably because of the policy of immediate contralateral fixation [1]. Finally, the need for contralateral scrotal exploration and orchiopexy is reemphasized.

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