

# A fusional anomaly of the epididymis associated with recurrent testicular torsion

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## KEY WORDS

epididymis ▶ anomaly ▶ testicular torsion ▶ recurrent

## ABSTRACT

A 31-year-old man with recurrent testicular torsion and infertility was found to have a fusional anomaly of the epididymis on scrotal exploration in which only the head of epididymis was attached to the testis, while the body and tail were completely free. He had bilateral orchidopexy, which relieved pain and recurrent torsion. He was then referred for fertility treatment. Literature search has shown that infertility is more associated with congenital anomalies of the epididymis and not with recurrent torsions.

## INTRODUCTION

Fusional anomalies of the epididymis associated with cryptorchidism have been studied and reported in the literature [1, 2]. Additionally, factors leading to intravaginal testicular torsion mainly due to bell clapper deformity and presence of mesorchium are well known and described in standard texts [3]. In this case report, we found a fusional anomaly of the epididymis associated with recurrent testicular torsion in a patient with primary infertility.

## CASE REPORT

S.L. is a 31-year-old man who presented to outpatient urology because of inability to conceive two years after marriage and regular sexual intercourse. His wife, who is 30 years old, had a miscarriage in her twenties. He has never achieved a successful conception. He also complained that since his early twenties, both testes intermittently twist causing him severe pain. During an acute episode, the spermatic cord bunches up and he untwists it himself to obtain relieve. He denied pelvic or genital injuries, sexually transmitted, or systemic diseases.

On examination he was tall, with normal secondary sexual characteristics and each testis having a longitudinal length of 3.5 cm. The testes were of normal texture and his spermatic cords were long but not bulky.

He had a normal hormonal profile. However, 63% of his sperm were non-motile and only 2% were normal forms despite a normal count of 46 million.

He agreed to have scrotal exploration and fixation of both testes.

Exploration was performed and the right testis was found to be normal with a long spermatic cord. Three-point fixation was performed with 3/0 prolene. On opening the left scrotal sac, the spermatic cord was long and torted. The testis was additionally

torted in a cranio-caudal axis such that the upper pole was facing down. Additionally, the body and tail of the left epididymis were completely unattached to the body and lower pole of the left testis, leaving only the head of the epididymis attached to the body. There was thus an inverted V defect with the apex of the V at the head of epididymis (Fig. 1). The lower pole was smooth and the tunica albuginea looked pale. A three-point fixation was again performed.

At six weeks post orchidopexy, the patient said that the testicular pain and recurrent testicular torsion had resolved. He was subsequently referred for fertility treatment.

## DISCUSSION

Fusional anomalies of the epididymis are classified into Type A and B according to Eckstein in his studies of epididymal anomalies associated with maldescent of the testis [4]. Type A is complete absence of the epididymis and vas deferens. Type B has four groups according to the nature of attachment of the epididymis to the testis. Our patient had type B group 2.

Some studies have correlated epididymal fusional anomalies in undescended testis as associated with infertility. Thus, Merksz et al. reported that in 612 out of 1386 operations for undescended testis, epididymal developmental abnormalities were detected that did not make passage of sperm to the vas deferent possible [5]. He also thought that undescended testis and fusional anomalies of the epididymis are a consequence of pathological intrauterine hormonal processes [6].

However, a prospective study of 43 consecutive patients with recurrent sub acute torsion by Jones, using clinical examination, hormonal assays, and seminal fluid analysis before scrotal exploration as well as testicular biopsy at exploration has shown that there

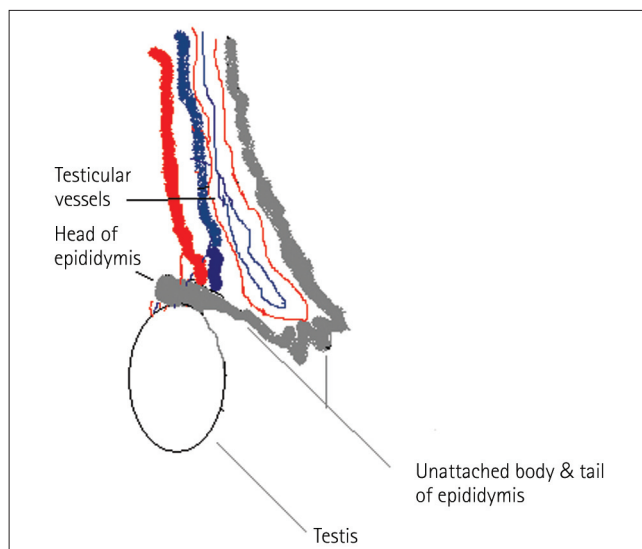


Fig. 1. An illustration showing epididymis attached to the testis only at its head and the inverted V deformity.

is no evidence of testicular damage as a result of recurrent sub acute torsion [7]. Similarly, Anderson (et al.) studied 20 post pubertal males with acute torsion using contralateral testicular biopsy at operation as well as seminal fluid analysis and FSH levels post-op. They found that those who had low sperm count and raised FSH were the ones that had abnormal histology of the contralateral testis. There was minimal anti-sperm and no anti-testis antibody. They concluded that impaired spermatogenesis in acute testicular torsion could be due to an underlying defect [8].

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