Case Report

What shall we do for Bilateral Undescended Testes Detected in a 21-Year-Old Male? - ț

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ABSTRACT

Undescended Testis (UDT) is a common anomaly encountered in urology and is estimated to affect 1-4% of full term and up to 30% of preterm male neonates. We present a case of bilateral undescended testes detected in a 21-year-old male. On the routine hematological examination levels of serum tumor maker and hormone was within normal range. On the computed tomography scan of the abdomen with contrast demonstrated that both testes were on the inguinal area with no evidence of malignancy. The patients wanted to preserve his testes. Also, our medical team thought that preservation of testes is better option, to avoid hormone replacement therapy for his whole life. Finally, bilateral orchiopexy with herniorrhaphy was performed successfully. We gave him an education to conduct annual follow up his testes in clinics due to high possibility of malignancy development than normal patients.

Keywords: Hormone; Malignancy; Undescended testis

INTRODUCTION

Undescended Testis (UDT) is a common anomaly encountered in pediatric urology and is estimated to affect 1-4% of full term and up to 30% of preterm male neonates [1]. UDT, especially bilateral, is associated with impaired spermatogenesis, endocrine derangements and increased risk of testicular malignancy [1]. There is an emerging consensus among pediatric surgeons and urologists about the management of UDT with recommendations that the diagnosis of congenital UDT should be confirmed at 3-6 months of age and orchidopexy done at 6-12 months of age [2].

DISCUSSION

Hormonal therapy for UDT has historically been described but since shown to have high recurrence rates with potential risk to testicular germ cells [3]. The orchidopexy is the gold standard of treatment for UDT, similar to other accepted guide-lines, and has been so for many years [3]. Despite this, a surprising proportion of respondents thought that either hormonal therapy or watchful
waiting was acceptable as an initial treatment option. Unfortunately, in our case of bilateral UDT detected in a 21-year-old male. In literature of a unilateral UDT detected in adult, may treated by orchiectomy to prevent malignancy development [4,5]. However, if bilateral orchiectomy were performed, hormone replacement therapy for his whole life is needed. Also, he needs his testes for reproduction in near future. It was challenging to decide proper treatment for him.

The orchiopexy performed before puberty decreases the risk of testis tumor compared to those boys with UDT who undergo orchiopexy after puberty [6]. The UDT is one of the established risk factors for testicular tumor. The commonest malignancy noted in UDT is seminoma. However, in our patients, serum tumor maker and findings of imaging studies suggest of no evidence of malignancy.

The testes are the male gonad in male. Testes are components of both the reproductive system and the endocrine system. The primary functions of the testes are to produce sperm and to produce androgens, primarily testosterone. The fertility is impaired after both, unilateral or bilateral UDT. It has been quoted that around 90% of patients with untreated bilateral UDT ultimately develop azoospermia [7]. The reduced fertility has been ascribed to the reduction in the total number of germ cells and to defective pre-pubertal germ cell maturation [7]. As in the literature, in our patient, azoospermia was occurred. Serum levels of FSH, LH, and testosterone are considered to be markers of testicular function. A few studies have also been performed on UDT children, with somewhat contradictory outcomes. Christiansen, et al. [8] reported that there were no significant differences in these hormone levels on UDT boys compared with normal prepubertal boys, and there was no difference between unilateral and bilateral UDT. However, Longui et al. [9] reported that UDT boys under the age of 4 year had higher FSH levels than controls. While, androgens levels was normal and endocrine function was preserved in our patient. We gave our patient for full information and right of choice for his disease. The patients wanted to preserve his both testes. Also, our medical team thought that preservation of both testes is better option, to avoid hormone replacement therapy for his whole life.

In conclusions, we preserved both testes in both UDT in a 21-year-old male soldier. It is important to give him an education to perform a monthly testicular self-examination and an annual follow up in clinics due to high possibility of malignancy development than normal patients.

REFERENCES