

## CHAPTER 8

# UNDESCENDED TESTES DIAGNOSIS AND TREATMENT

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## INTRODUCTION

The presence of the testis in the groin or abdominal cavity rather than the base of the scrotum is known as an undescended or cryptorchid testis. While 2-5% of newborn boys and 30% of preterm male neonates have congenitally undescended testes (UDT), roughly half of cases naturally descend and fall to 1-2% at three months(1,2,3,4). When the hypothalamus-pituitary-gonadal axis is active, follicle-stimulating hormone (FSH), luteinizing hormone (LH), insulin-like hormone 3 (Insl3), and testosterone levels rise quickly around 1 month of age and peak at 2-3 months, a process known as “mini-puberty,” this postpartum drop takes place. based on the time era. At six months, these hormone levels start to decline. Intriguingly, inhibin B levels reflect the functional activity of Sertoli cells in infancy, while anti-Mullerian hormone (AMH) likewise rises around 1 month of life but doesn't plateau until late adolescence (5). The transition of spermatogonia to the adult dark type occurs concurrently with this activity in the first three to six months of life, and this cell type is now thought to be the stem cell for future spermatogenesis (5). On the other hand, in boys with UDT,

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old); this shows that the bulk of the testicles cannot contribute to fertility and points to orchectomy as a possible therapy option(61). UDT (inguinal and abdominal) are more susceptible to seminoma (74%), corrected cryptorchid, or malignant transformation of the scrotal testis, which is more likely to become nonseminomatous (% 63). On the other hand, remains of the scrotal testis may contain germinal tissue; nonetheless, only one instance of CIS has been documented, indicating a very low risk of malignancy in these remnants(62). Currently, the American Urological Association and the European Urological Association, among other groups, recommend orchectomy over traditional testicular descent in these patients. Although this recommendation is controversial in some parts of the world, especially in Latin countries, recently published data supports this practice(62, 63).

If the history of ascending testis is compelling, post-pubertal situations with post-pubertal presentation, orchectomy should be advised, and if the patient declines, vigilant monitoring for malignant alterations following orchiopexy should be carried out. If the history of ascending testis is compelling, post-puberty orchiopexy may lower the risk of infertility without raising the risk of cancer (2,4,64).

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