# Summary

The testis is the primary male sex organ normally located in the scrotum. UDT represent one of the most common anomalies of childhood. This anomaly occurs when the testis fails to descend into its normal postnatal anatomic location, the scrotum. The objective of this work is to review of literature dealing with the UDT with the purpose of better understanding and better management of this anomaly.

The gonad is differentiated into a testis by the $7^{th}$ week of gestation. Many theories have been proposed to explain the abnormal descent of the testis. They include hormonal, traction, differential growth, intra-abdominal pressure, epididymal theories.

The testis is invested by three coats. It's supplied by testicular artery, cremasteric artery and artery to vas deferens.

The testis has both exocrine function, production of sperms by spermatogenic cells and endodrine function, secreation of testosterone by Leydig cells.

Histopathological changes in the UDT may start early of life. These changes include chromosomal that may have a possible role in subsequent development of malignancy. The cause of UDT is not clear and many possibilities should be considered. They include difficient gonadotrophic hormonal stimulation, gubernacular and structural abnormalities, intrinsic testicular defect, neurological abnormalities and mechanical obstruction.

The complications of UDT including infertility, malignancy, trauma, torsion, hernia and emotional consequences.

The cardinal symptom of UDT is absence of one or both testes from the scrotum. Careful examination is done to determine whether the testis is impalpable or palpable and if palpable it is undescended or retractile.

Investigations of UDT include U/S, CT, MRI, hormonal findings, venogrpahy, arteriography and laparoscopy.

Treatment of UDT may be hormonal or surgical or both. The optimal time for placing the retained testis into the scrotum should be before histological changes in the seminiferous tubules between 6-8 months.

Hormonal treatment includes two types: HCG and GnRH. Most of UDT located in the inguinal region and orchiopexy is done through the standard inguinal incision. For high impalpable testis, special techniques of orchiopexy may be needed including orchiopexy by spermatic vessels transection. If the testis is small and atrophic after puberty, it is better to done orchiectomy to avoid malignancy.

Laparoscopy is now the most sensitive and specific procedure to localize impalpable UDT and to determine whether a gonad is present or absent. Laparoscopy is widely used as the step in the management of a non-palpable testis as orchiopexy, spermatic vessels transection orchiopexy, orchiectomy and hernia repaire are done by laparoscopy. Follow-up after orchiopexy should not be neglected.