

INDICATION OF TESTICULAR BIOPSY
IN EVALUATING HORMONAL
THERAPY FOR UNDESCENDED TESTIS

THESIS

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Urology*

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English Summary

Twenty unilateral undescended testis (UDT) patients –aged less than 2 years- were divided into two groups. The first did not receive hormonal therapy before orchiopexy while those in the second group did. Testicular biopsies were taken intraoperatively and were sent for histopathological examination.

Then comparison between the amounts of normal developed germ cells to total germ cell present per a seminiferous tubule of both groups was done. It showed a significant rise in this amount in the slides of testicular biopsies of the second group, which may indicate that hormonal therapy is effective in facilitating normal germ cell development in the UDT patients- aged less than 2 years- by helping the transformation of primitive germ cells to adult dark (Ad) spermatogonia. This transformation normally occurs in normal descended testis at the age of two to three months.

So, it seems from our results, that it is beneficial to routinely give hormonal therapy before surgical treatment, which will give the patient the benefit of increasing the amount of Ad spermatogonia in the testis and may improve the fertility of this testis at puberty age.

In group two, all cases showed significant improvement of germ cell development under the effect of preoperative hormonal therapy suggesting that there is no need for routine biopsy at orchiopexy, however the need for use of post operative hormonal therapy was not addressed.

Thus this issue still needs more research to study all the benefits and losses from usage of surgical and hormonal therapy. And we shall need further study of the serious complications of the UDT disease and in particular its impact on the future fertility.

KEY WORDS: orchiopexy – adult dark spermatogonia – Human chorionic gonadotropin – testosterone - seminiferous tubule.