

Importance of testicular biopsy for validation of diagnosis; cryptorchidism, analyzing pre-scrotal undescended testes

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Introduction

The hallmark of successful treatment of cryptorchid boys is fertility. However, reported incidences of normal spermograms for unilateral cryptorchid patients range from 83% to 22%.

The greatest problem in any discussion on undescended testicles is to exclude the retractile testis, for which no treatment is required except categorical reassurance. Examination in older boys has certainly fooled many doctors and even experienced surgeons many times.

Over half of the patients sent for treatment are in this category.

If retractile testis is «treated», the «results» are bound to be good, It is vital to exclude such cases from the discussion. (1)

Aim-Patients

We hypothesize that in a pool of patients with pre-scrotal testes a certain number of testes with normal histology could be found, thus explaining the wide range of fertility outcome in unilateral cryptorchid boys.

301 cryptorchid boys having had orchidopexy and testicular biopsy performed by a single surgeon were analyzed. 15 % (45/301) of boys were found to have pre-scrotal located testes. Germ cell number and differentiation were estimated by analyzing at least 50 tubular cross-sections.

Results

Cryptorchid testis has always abnormal histology, performing testicular biopsy it is possible to differentiate between cryptorchid and a normal testicular histology thus validating obtained clinical diagnosis

Sixty-seven percent (30/45) of boys had a **normal** testicular histology for age [group A] while 15/45 (33%) [Group B] had a typical cryptorchid testicular histology with reduced germ cell number with **53%** 8/15 belonging to high infertility risk group (no Ad spermatogonia and germ cell count <0.2/tubule).

Patients age at orchidopexy was similar; 6.0 (95%CI.4.4-7.9) years (A), 6.6 (95% CI.5.5-7.6) years (B)

Conclusions

HIR histology in the UDT predict HIR in the contralateral testis with 86% sensitivity and 24% specificity. The positive likelihood ratio of unfavorable (HIR) findings in the contralateral testis when the UDT had unfavorable histology was 1.13 (2) High percentage of pre-scrotal testes with normal histology underscores the need for testicular biopsy to predict patient's fertility chances and more exact validate diagnosis; cryptorchidism. Fertility studies without testicular biopsy are subjected to overrepresentation of patients with normal fertility.

References

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Nothing to disclose

