

عنوان مقاله:

Relationship of Azoospermia Factor (AZF) and Inhibin B Level in Patients with Non-Obstructive Azoospermia

محل انتشار:

مجله علوم دارویی و شیمی، دوره 6، شماره 8 (سال: 1402)

تعداد صفحات اصل مقاله: 13

نویسندگان:

Ahmed Gamal El-Metwaly Ghanem - *IM.B.B.Ch, M.S. Clinical Pathology, Specialist of Clinical Pathology, Mansoura Fever Hospital, Egypt*

Mohamed Ali Atwa Barakat - *Professor of Clinical Pathology, Faculty of Medicine, Mansoura University, Egypt*

Reham Mohammed El-Farahaty - *Professor of Clinical Pathology, Faculty of Medicine, Mansoura University, Egypt*

Youssef Elbayoumi Youssef Soliman - *Professor of Dermatology, Andrology and STDs, Faculty of Medicine, Mansoura University, Egypt*

Sohier Yahia - *Professor of Pediatrics and Genetics, Faculty of Medicine, Mansoura University, Egypt*

Hosam Abdel Twab - *Lecturer of Clinical Pathology, Faculty of Medicine, Mansoura University, Egypt*

خلاصه مقاله:

Background: Non-obstructive azoospermia (NOA) is a challenging subset in management of infertile males. Micro-deletion of the azoospermia factor (AZF) region located on long arm of the Y-chromosome (Yq11) is considered as the commonest observed genetic cause among infertile males. Inhibin-B was identified to be a more sensitive factor in evaluating azoo-spermic males than FSH and testicular biopsies. **Patients and Methods:** In this prospective case-control study, 150 participants were separated into two groups: group (A) consisted of 75 patients with non-obstructive azoospermia, and group (B) consisted of 75 age-matched, fertile men having a child in the year prior to the study as a control group. Entire cases were subjected to full history taking and complete examination followed by laboratory analysis which comprised semen analysis, hormonal assays, including TSH, FSH, LH, E₂, prolactin, total testosterone, and inhibin-B and detection of AZF micro-deletion. **Results:** PRL, FSH, and LH were significantly higher ($P = 0.028$, <0.001 , <0.001), while total testosterone, inhibin-B level, TT/FSH, and inhibin-B/FSH ratios were significantly lower ($p < 0.001$ for each) among azoospermia cases compared with control group. The frequency of AZF micro-deletions among azoospermia cases was 40/75 (53.3%). AZFc deletion was the most frequent type of Y-chromosome micro-deletion. **Conclusion:** AZF and inhibin B levels were demonstrated to be significantly correlated in patients with non-obstructive azoospermia. Higher FSH, lower testosterone, and lower inhibin-B levels could be considered as risk predictors for azoospermia, but could not be considered as risk predictor of AZF deletion among azoospermia cases.

کلمات کلیدی:

Azoospermia Y, chromosome Azoospermia Factor Inhibin, B

لینک ثابت مقاله در پایگاه سیویلیکا:

