

عنوان مقاله:

Y chromosome microdeletions frequency in idiopathic azoospermia, oligoasthenozoospermia, and oligospermia

محل انتشار:

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خلاصه مقاله:

Background: Genetic factors are candidates for about 30% of male infertility with sperm production-related abnormalities. Y chromosome microdeletions are responsible for around 10% of male infertility. These microdeletions generally occur in azoospermia factor on the Yq. That is often associated with the quantitative reduction of sperm. Objective: The aim of this cross-sectional study was to determine the frequency of Yq microdeletions among idiopathic azoospermic, oligoasthenozoospermic, and oligospermic men in Shohada infertility center, Chaharmahal va Bakhtiari province. Materials and Methods: A total of 81 idiopathic azoospermic, oligoasthenozoospermic, and oligospermic infertile men were selected as cases and 81 fertile men assigned to control group. For molecular investigations, 13 sequence-tagged site markers were chosen from azoospermia factor (AZF) region for detection of Y chromosome microdeletions and amplified by two separate multiplex-polymerase chain reaction. The relationship between the AZF microdeletions and incidence of male infertility in the family, consanguineous parents, smoking, and the levels of reproductive hormones among infertile men were investigated. Results: The total frequency of the microdeletions was 6.17% (2 cases in azoospermic, 3 cases in oligoasthenozoospermic subgroups, and none in the oligospermic participants and the control group). Most deletions (3.7%) were seen in the AZFb followed by the AZFc (2.46%) and none in AZFa. No significant association was seen between the microdeletions and clinical characteristics. Conclusion: Although the frequency of Yq chromosome microdeletions in Chaharmahal va Bakhtiari province is lower than the mean frequency of Iran, the frequency is comparable to those reported by some studies in Iran.

کلمات کلیدی:

Male infertility, Y-chromosome microdeletions, Azoospermia factors

لینک ثابت مقاله در پایگاه سیویلیکا:

