GENETIC ANALYSIS OF MALES WITH IDIOPATHIC INFERTILITY FROM BANGALORE

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Infertility is a reproductive health problem that affects 13-18\% couples. Half of all infertile cases can be traced to male partners. Many cases with idiopathic male infertility have a genetic and/or molecular basis. Several studies have been carried out on the cytogenetic and molecular basis of idiopathic male infertility, mainly in the western populations. However, our knowledge on the possible cytogenetic and molecular basis of idiopathic infertility in the infertile Indian male population is scanty, despite the urgent need for such information in the clinical management of male factor infertility. Recently, three groups have independently reported molecular basis of idiopathic male infertility in cases from Hyderabad, Delhi and Varanasi. However, there is no report on the genetics of the idiopathic male infertility in cases from Bangalore. To this end, we have begun to ascertain cases with idiopathic male infertility from Bangalore. So far, we have ascertained a total of 25 cases with idiopathic male infertility from Bangalore. These cases were either azoospermic or oligospermic. The G-banding chromosome analysis showed a normal male karyotype in these infertile males. PCR-based microdeletion analysis of the Y-chromosome in 23/25 patients showed deletions in three patients (13\%) in the AZFc region. The sizes of the deletions were variable in these patients. The present findings will discussed with respect to other observations in Indian as well as western populations (Financial support from ICMR, New Delhi is gratefully acknowledged).