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- Chromosomal analysis of control subjects with GTG banding showed a normal karyotype of 46,XY without any structural or numerical abnormalities.

- About 13.68% of infertile men showed different types of chromosomal abnormalities, which include 3.42%, 6.84% and 3.42% of constitutional chromosomal abnormalities, variants and low-level mosaicism respectively. The breakpoints and rearrangements of chromosomal regions and synaptonemal disturbances may cause impaired sperm production and resulted in infertility.

- In 12.56% of infertile men showed microdeletions in one or more sequence-tagged sites (STS) with a percentage of 1.14, 2.28, 9.14 for AZFa (sY84, sY86), AZFb (sY127, sY134) and AZFc (sY254, sY255) respectively; an increase in the frequency of microdeletion was observed in AZFc region when compared to AZFb and a loci.

- The frequency of microdeletions was found to be 9.14% in the azoospermic group and 3.42% in the oligoazoospermic infertile men.

- The frequency of M/V genotype of CFTR of exon-10, was found to be significantly high in infertile men than controls (OR 3.3; 95% CI 1.67-6.52, \(p<0.001\)) suggest an association of the polymorphism for infertility.

- Only 2.02% infertile men showed a correlation of CA, Yq microdeletion and M470V polymorphism.