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Microdeletions of *AZFc* Region in Infertile Men with Azoospermia and Oligoasthenoteratozoospermia

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ABSTRACT Considerable progress has been made to study the pathophysiology of male infertility in the last few years. About 10-15% of genetic causes such as chromosomal abnormality, single gene and multifactorial mutations may be a causative factor. Submicroscopic microdeletions on chromosome Y is considered to be the most frequent genetic defects associated with impaired spermatogenesis. Therefore, the aim of this present study was to assess pregnancy outcome of intracytoplasmic sperm injection (ICSI) in infertile men from 285 study subjects; fertile controls (*n=110*) and cases (*n=175*) with sperm count less than 5 millions/ml [azoospermia *(n=150)* and oligoasthenoteratozoospermia *(n=25)*]. Microdeletions located on chromosome Y-sY84, sY86 (*AZFa*), sY127, sY134 (*AZFb*), and sY254, sY255 (*AZFc*) were confirmed with Polymerase Chain Reaction (PCR). A *12.56%* was observed in infertile men in one or more STS with a percentage of 1.14, 2.28, 9.14 for *AZFa*, *b* and *c* respectively. The azoospermia factor region c (*AZFc*) loci showed an increase in frequency when compared to *AZFb* and *a* regions. Intracytoplasmic Sperm Injection (ICSI) could be offered or an alternative method to patients with *AZFc* deletion.