Research was higher than in oligozoospermic 9.5%

Research over the pastfew years has clearly demonstrated that infertile men have an increasedfrequency of chromosomal abnormalities. These findings are further co-relatedby increased frequency of chromosomal abnormalities found in newborns andfetuses born from the pregnancies conceived by ICSI. As reported in literature, in half of the couples with unsuccessful pregnancy, the cause of infertility ismale related, and of them in about 30% genetic factors with abnormal semenparameters should be considered. Chromosomal abnormality is one of theimportant cause of male infertility because it disrupts genes involved in thegenetic control of human spermatogenesis 10, 11, 12, 13. In presentstudy, the incidence of chromosomal abnormalities in azoospermic group 16. 3%was higher than in oligozoospermic 9. 5% with an overall occurrence of 11. 2 %Table I, clearly demonstrated an inverse correlation between chromosomalanomalies and sperm count.

Also these findings were comparable to the literaturedata varying from 2. 2 – 22. 6% 3, 4, 11, 13. No chromosomal abnormality had beenfound in control group (P <0. 05). Sexchromosomal abnormalities (13.

9%) in our study were predominant in azoospermiaover autosomal abnormalities (2. 9%), while autosomal abnormalities (6. 5%) werepredominant in oligozoospermia over sex chromosomal abnormalities (2. 9%). Allautosomal abnormalities (5.

6%) were structural type while the sex chromosomeabnormalities (5. 5%) were found both structural as well as numerical types (TableI). All numerical abnormalities (3. 3%) were ofKlinefelter’s syndrome in which 4

patients were of classical form 47, XXY and 2were of mosaic form 47, XXY/46, XY. Klinefelter’s syndrome has impairedspermatogenesis associated with severe oligozoospermia or azoospermia causinginfertility.

This is caused by lethal dosage introduced into cells by anadditional ‘ X’ chromosome, which does not permit the development of sertolicells and survival of germ cells in the testis, resulting in azoospermia due tothe advanced germ cell atresia and aplasia. Gonosomal mosaicism leads intosevere oligospermia, may be a probable cause for the failure of assistedreproduction 12, 13, 14.