of patients for whom a pregnancy could be achieved and patients without pregnancy (M ± SEM): sperm concentration: 24.8 ± 7.3 mill/ml vs 22.5 ± 13.1 mill/ml; progressive motility: 39.5 ± 14.2% vs 41 ± 8.7%; normal sperm morphology: 21.6 ± 6.0% vs 23.4 ± 7.4%. After Percoll centrifugation sperm concentration was significantly higher compared with swim-up preparation (23.9 ± 11.6 mill/ml vs 10.4 ± 6.3 mill/ml) whereas progressive motility was higher after swim-up (88.3 ± 11% vs 56.4 ± 17.4%). Pregnancy rates in both groups were similar (9.3% vs 6.1%).

Conclusion: Even in the era of IVF/ICSI treatment, IUI may be considered for treatment of mild to moderate male factor infertility. As most of the pregnancies are achieved within 1–4 treatment cycles, not more than 4 cycles should be performed. On the basis of conventional semen parameters the outcome of IUI treatment can not be predicted accurately.

P-042


Objective: The minimal sperm requirement to achieve high fertilization rate (FR) and pregnancy rate (PR) with intracytoplasmic sperm injection opened the possibility of cryopreserving surgically retrieved spermatozoa for future use, specially when it is difficult to have fresh samples or to avoid a new surgical procedure. The objective of this study was to compare the results of ICSI using cryo-thawed spermatozoa (surgically retrieved and ejaculated) to the results when fresh spermatozoa were used.

Design: Retrospective analysis of ICSI outcome using cryo-thawed versus fresh spermatozoa in cases of obstructive azoosperma and severe oligosperma.

Materials and Methods: Group A: Cryo-thawed sperm from 34 patients were analysed including testicular sperm N=8; epididymal sperm N=4 from cases with obstructive azoospermia, and ejaculated sperm N=22 from cases with severe oligosperma. Group B: Fresh sperm from 221 patients, testicular N=85, epididymal N=40 from cases with obstructive azoospermia and ejaculated N=96 form cases with severe oligosperma. The FR, and PR were compared between the two groups.

Results: All patients had successful fertilization and reached embryo transfer stage. The FR and PR in group A were 56.3% and 33.3% respectively when surgically retrieved cryo-thawed spermatozoa were used and 59.1% and 22.7% when cryo-thawed ejaculated spermatozoa were used. In group B the FR, and PR were 55.8%, 31.2% when surgically retrieved fresh spermatozoa were used and 61.8% and 27.1% when fresh spermatozoa were used. There was no statistical significant difference between cryopreserved and fresh sperm in both groups.

Conclusions: The use of cryo-thawed spermatozoa whether surgically retrieved in obstructive azoosperma or ejaculated in cases of severe oligosperma for ICSI gives a comparable results to fresh samples and offers a valuable therapeutic option specially for azoosperma patients.
Objective: In this study, we tried to assess the effects of the co-culture system on the motility characteristics of ejaculated human sperm and the possible mechanisms of improving sperm functions through the co-culture manipulation.

Design: We hypothesized that sperm functions can be maintained or improved by the co-culture system through the prevention of oxidative damage to sperm by reactive oxygen species. To test this hypothesis, we measured various functional parameters of sperm motility, the concentration of lipid peroxides in the culture medium and the accumulation of 8-hydroxy-2'-deoxyguanosine in spermatozoa during incubation with or without the co-culture of Vero cells.

Materials and Methods: Ejaculated human sperm from 35 healthy men were studied. The variable functional parameters of sperm motility, the concentration of lipid peroxides in the culture medium and the accumulation of 8-hydroxy-2'-deoxyguanosine in spermatozoa during incubation were compared between two groups of sperm with or without the co-culture of Vero cells.

Results: Ejaculated human sperm co-cultured with Vero cells showed that sperm functions were maintained and the percentage of hyperactivated sperm in co-culture group was not affected. While the sperm of the control group completely lost the motility, the sperm co-cultured with Vero cells still maintained 74±25% of the original motility. Lipid peroxidation and accumulation of 8-hydroxy-2'-deoxyguanosine in spermatozoa were also reduced by the co-culture manipulation, which strongly indicates that intercellular interactions may play some roles in the maintenance of sperm functions.

Conclusions: We conclude that the generation of reactive oxygen species of the sperm can be reduced by the co-culture system and thereby protects sperm from oxidative damages.

**P-044**


There were no statistically significant differences in the fertilization (2PN), pregnancy, and pregnancy loss rates and embryo grades for total motile count, sperm morphol-