

Clinical Results of the Intracytoplasmic Sperm Injection (ICSI) at Baqai Institute of Reproduction and Developmental Sciences (BIRDS)

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Madam, I would like to report the successful outcome of intracytoplasmic sperm injection (ICSI) technique, first time used in Pakistan at Baqai Institute of Reproduction and Development Sciences (BIRDS), for male infertility. Since the first in Vitro fertilization (1W) baby born in 1978¹. Many techniques have been added to the classical method. Increasing male factor infertility around the world and limited effectiveness of IVF in the case of severe male factor problem, introduction of ICSI has given many couples the chance of parenthood which otherwise would have been impossible. The use of micromanipulation technique and the first pregnancy in humans was reported by Palermo et al in 1992². The only criteria for success with ICSI is the presence of a few motile or live sperms somewhere in the male reproductive tract which can be retrieved for injection. Fertilization rates of 60-70% with ICSI are obtained once the injection procedure has been optimized^{3,4}.

After three years of experience in Assisted Reproduction Techniques, BIRDS launched its ICSI program in 1997. In first year 71 patients were selected for ICSI on grounds of severe male infertility as oligospermia, asthenospermia, teratozoospermia and azoospermia. Eighty-six cycles were stimulated in a routine way for superovulation. Total 838 oocytes were collected from these stimulated cycles and 676 oocytes, at Metaphase II stage of maturity were injected with normal and motile single sperm. A fertilization rate of 58.94% was achieved in cases of ejaculated sperms. A better rate of 64% was achieved with surgically collected sperms by percutaneous epididymal sperm aspiration (PESA) and Testicular sperm excision technique (TESE). The total number of 175 embryos were transferred in 64 women.

Clinical pregnancies were confirmed on presence of fetal cardiac activity on ultrasound scan. Seventeen women conceived, giving 19.76% pregnancy rate per cycle. Six nonnal healthy babies have been born till now and others are progressing well. ICSI proved to be the only successful treatment for men with poor quality semen and azoospermia. These results are comparable with other centers^{3,5}.

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References

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