

**Outcome of intracytoplasmic injection of sperm obtained by testicular sperm extraction from 14 azoospermic men suffering from 47,XXY Non-mosaic Klinefelter's syndrome**

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摘要

**Abstract**

Objective: The purposes of this study were to evaluate the potential for testicular sperm extraction (TESE) from azoospermic patients with non-mosaic Klinefelter's syndrome and to determine the outcome of intracytoplasmic sperm injection (ICSI) using the extracted testicular sperm sample. Materials and Methods: Fourteen couples suffering from primary infertility in which the male partner had the azoospermic non-mosaic 47,XXY karyotype (Klinefelter's syndrome) participated in this study. All of the women underwent controlled ovarian hyperstimulation. Open testis biopsies were conducted 1 day prior to or on the day of oocyte retrieval. Motile sperm, extracted from the biopsied tissues in a wet preparation, were used for ICSI. The outcome of ICSI was evaluated from the fertilization rate, embryo-cleavage rate, clinical pregnancy rate, and chromosomal status of resultant fetuses or delivered babies. Results: Sperm retrieval was successful in eight of 14 patients (sperm retrieval rate, 57%). In total, 118 mature oocytes were injected with extracted motile spermatozoa. This resulted in the production of 70 fertilized oocytes (fertilization rate, 59%) and 67 embryos (cleavage rate, 96%). Among the eight women who underwent embryo transfer, six achieved clinical pregnancies (clinical pregnancy rate, 75%). The outcome of these pregnancies included one blighted ovum and the birth of four male and five female healthy babies. The live delivery rate was 62.5%. All of these babies were chromosomally and physiologically normal. Conclusion: This study demonstrates that azoospermic patients suffering from non-mosaic Klinefelter's syndrome can father their own genetic offspring when the TESE procedure is combined with ICSI and embryo transfer techniques. [Taiwanese J Obstet Gynecol/2004;43(2):88-96]