

Title Page

Outcome of vitrified oocyte injected by immotile testicular spermatozo with totally multiple morphological abnormalities of the sperm flagella : a case report

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Abstract

Background: There is no case report on the outcome of vitrified oocyte injected by immotile testicular spermatozo with totally multiple morphological abnormalities of the sperm flagella(MMAF) ,although more and more MMAF patients are reported.

Methods: A couple diagnosed with MMAF returned to the clinic in order to attempt pregnancy using their vitrified oocytes , which had been frozen at the first ICSI cycle, and testicular spermatozo was used instead of the ejaculated sperm.

Results: All the testicular spermatozoa were completely immotile and mostly curled at the end piece of the flagellum.12 warmed oocytes were injected ,which survived successfully after thawing. Nine two-pronuclei and one-pronuclei oocytes were obtained at 16h post-ICSI. On day 3, two 8-cell embryos with < 20% fragmentation were transferred,but failed. Two of the remaining 6 embryos developed to blastocyst after D6,and a grade of 5BB blastocyst was frozen. Offspring were obtained after transfer the frozen blastocyst of 5BB in the last attempt . A normal female baby was delivered,with a birth weight of 3050g and a length of 53cm.

Conclusion: This case report demonstrates that high rates of fertilization can be obtained for MMAF patient, even in vitrified oocyte injected by testicular sperm. And maybe testicular sperm is better than ejaculated sperm,especially in mostly curled flagella patient.

Keywords

vitrified oocyte,testicular spermatozo, sperm flagella,case report

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