# The Effect of repeated percutaneous epididymal sperm aspiration on sperm parameters of azoospermic patients

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## Abstract

There are a limited number of infertile males with obstructive azoospermia, At present, spermatozoa can be aspirated with a simple technique called, percutaneous epididymal sperm aspiration (PESA). It is also possible to repeat PESA to aspirate spermatozoa for intracytoplasmic sperm injection (ICSI) cycles.The objective of this study was to evaluate whether of not repeated PESA would cause any obstruction, scars, or defects on sperm parameters.Eighty–nine azoospermic cases were admitted to the university infertility center.A total of 235 PESA who underwent 199 ICSI cycles were selected for this retrospective study.Sperm concentration, motility, and normal morphology, as well as the fertilization rates were statistically evaluated for each time.Sperm concentration ($\times 10^6$/ml) in first to forth PESA was 37.68, 45.58,35.62, and 19.13, respectively.Sperm motility in the above groups was 24.95%,23.10%,23.24%,and 25.71%,respectively. Also,fertilization rate (FR) was 66.36, 68.35,71.89, and 74.70 percent, respectively, for the same groups.There was not any significant difference in sperm parameters and FR in patients undergoing 1 to 4 PESA In addition, neither obstruction nor scars were reported in PESA.cases. We Conclude that repeated PESA is safe and reliable, and does not cause any significant defects in sperm parameters. Also, this technique can be repeated in individuals with obstructive azoospermia to aspirate sperm for a treatments regimen.

**Keywords:** Azoospermia, Repeated PESA, ICSI, Sperm Parameters, Male factor Infertility.
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