

TESA/ICSI Outcome among Obstructive and Non-Obstructive Azoospermia

Rowaida Alhamad, BSc* Nayla Bushaqer, MD** Wadha Mohawash, MD*** Mashaal Algafli, MD****
Haya Rawah, MD***** Fatima Alrakaf, MD***** Hisham Ayoub, FACH*****
Nawal Dayoub, MRCOG*****Nouf Alasmari, MD*****

Objective: To evaluate the Intracytoplasmic Sperm Injection (ICSI) cycle outcome for azoospermic in non-obstructive azoospermia (NOA) compared to obstructive azoospermia (OA) patients undergoing TESA procedures.

Setting: IVF Unit, Prince Sultan Military Medical City, Riyadh, KSA.

Design: A Retrospective Study.

Method: The data of couples that underwent ICSI with fresh sperm retrieval using TESA and reached the stage of embryo transfer were documented from November 2012 to March 2015. A total of 85 patients were included in this study. Personal characteristics, laboratory data, TESA data, stimulation parameter and pregnancy outcome were documented.

Result: Fifty-six males had OA and 29 had NOA. Female characteristics including age, FSH, BMI and the parity were similar. Male characteristics including age, smoking, and TESA motility and count were similar. Cycle characteristics including cycle number, protocol type, stimulation drug and duration, and estradiol and progesterone on the day of human chorionic gonadotropin (hCG) trigger were similar. Stimulation outcome including the number of collected, mature, and fertilized oocytes, embryo transferred, the day of embryo transfer and number of grade 1 embryo were similar. There was significantly better quality oocytes and higher number of frozen embryos in NOA group, P-value=0.03 and 0.04, respectively. Pregnancy, implantation, and miscarriage rate were also similar with no significant difference between both groups.

Conclusion: ICSI cycle outcome for azoospermic patients in NOA compared to OA undergoing TESA procedure was similar in both groups and no factors were affected the final cycle outcome.