## AB094. The utilization of microscopic surgery in the treatment of male infertility

## Dong Fang, Jing Peng, Yuan Tang, Wanshou Cui, Yiming Yuan, Weidong Song, Bing Gao, Zhichao Zhang, Zhongcheng Xin

Andrology Center, Peking University First Hospital, Beijing 100034, China

**Background:** To introduce the clinical use of microscopic surgery in treating male infertility by reviewing recent literatures and the recent advancement in clinical practice.

**Methods:** PubMed was searched for recent publications regarding microscopic surgery. Clinical experience from Peking University First Hospital was also summarized.

**Results:** The incidence of male infertility has been increasing for decades. Altogether there're over 50% patients with male infertility who were proper candidates for microscopic surgery. There are mainly three kinds of surgeries regarding microscopic surgery. (I) Microscopic varicocelectomy: a series of meta-analyses have confirmed that microscopic varicocelectomy could increase the pregnancy rate and the results were better than open

or laparoscopic surgery in terms of successful rate the occurrence of complications. The main predictive factor for post-operative pregnancy rate was semen concentration. (II) Microscopic vasoepididymostomy and vasovasostomy: the main cause for obstructive azoospermia is primary epididymal obstruction, which is suitable indication for microscopic vasoepididymostomy, and the successful rate was about 63.8-79.2% with pregnancy rate 30.6-35.8%, even for patients with prior failure to achieve pregnancy by sperm retrieval with intracytoplasmic sperm injection. (III) Microdissection testicular sperm extraction (Micro-TEST): non-obstructive azoospermia is difficult with common measure, while Micro-TEST provided a relatively higher successful rate, even for patients with some specific genetic alterations (e.g., AZFc deletion, Klinefelter syndrome). The cooperation with specialist of reproductive medicine is important.

**Conclusions:** Microscopic surgery could be regarded as important method in the treatment of male infertility. **Keywords:** Male infertility; microscopic surgery; varicocelectomy

doi: 10.21037/tau.2018.AB094

**Cite this abstract as:** Fang D, Peng J, Tang Y, Cui W, Yuan Y, Song W, Gao B, Zhang Z, Xin Z. The utilization of microscopic surgery in the treatment of male infertility. Transl Androl Urol 2018;7(Suppl 5):AB094. doi: 10.21037/tau.2018.AB094