

THE EFFECT OF MICRO TESE RESULTS AND PREOPERATIVE ANXIETY STATUS OF NON-OBSRUCTIVE AZOOSPERMIC CASES ON POSTOPERATIVE PAIN SCORE.

A.Egemen Avci*, Muammer Kendirci**, M.Murad BASAR***

*Memorial Atasehir Hospital, Department of Urology,

**Istinye University, LIV Hospital, Department of Urology,

***Memorial Sisli Hospital, Department of Urology, Istanbul, TURKEY

Abstract MP 20-478

Introduction

Infertility is an important problem that causes anxiety and depression in couples. Besides, azoospermia and the need of m-TESE operation further increase the anxiety of couples. The aim of this study was to evaluate depression and anxiety in infertile men who underwent m-TESE procedure due to NOA. Also, the relationship of m-TESE results with postoperative pain and preoperative stress status of patients was evaluated.

Materials & Methods

The study performed on NOA cases who underwent m-TESE between June 2018 and September 2019. A total of 102 patient was enrolled into study. All patients were evaluated with detailed preoperative physical exam, hormonal and genetic investigations. Preoperatively, Beck Depression Inventory (BDI) and Situational and Transient Anxiety Inventory questionnaires (STAI and TAI) were filled. The m-TESE procedures were performed under general anesthesia. In all procedures, the operation time and number of collected tubules were recorded. Intravenous analgesic was applied to all cases at the end of operation. After, Visual Analog Scales (VAS) was filled in for all cases. Additional analgesia and required time were also recorded. The relationship of m-TESE results with the patient's VAS score and additional analgesia requirement were evaluated.

Results

Successful sperm retrieval was obtained in 55.9% of cases who enrolled into the study. Mean age, duration of operation, number of collected tubules, scores for BDI, STAI and TAI and VAS values were given in Table-1. Mean operation time and number of collected tubules were significantly higher in m-TESE negative cases ($p < 0.001$). Although there was no significant difference in BDI, STAI and TAI scores between the groups, mean VAS scores was found to be significantly high in m-TESE negative cases compared to the positive cases (4.5 vs 2.8, $p < 0.001$). However, while mean VAS scores exerted meaningful positive correlation with BDI ($r = 0.232$; $p = 0.019$), operation time ($r = 0.423$; $p < 0.001$) and number of collected tubules ($r = 0.409$; $p < 0.001$), there was significant negative correlation between mean patients' age ($r = -0.269$, $p = 0.007$) and m-TESE outcomes ($r = 0.422$; $p < 0.001$). Postoperatively, a total of 32 (31.4%) patients necessitated additional analgesia and this necessity was found to be significantly higher in m-TESE negative ($n = 21$) then m-TESE positive ($n = 11$) patients (Pearson $\chi^2 = 8,749$; $p = 0.002$).

The same parameters were compared in patients who had undergone previous m-TESE (Table-2). Similarly, while mean operation time ($p = 0.008$) and VAS scores ($p = 0.002$) were higher in previous negative cases, there was no significant difference in BDI and anxiety scores in these two groups. Additionally, mean VAS scores showed meaningful correlation with m-TESE outcomes in these group ($r = -0.448$; $p = 0.002$).

Conclusions

This study demonstrates that presence of infertility and azoospermia in males affect the psychogenic status and anxiety levels. In addition, this work shows that previous micro-TESE procedure and its outcomes boosts the stress and anxiety levels of the infertile men that may result in diminished postoperative pain threshold.

Table-1: Patients' data according to m- TESE results. All data were presented as mean values. (Independent T-Test, * $p < 0.05$)

	m-TESE Negative (n=45)	m-TESE Positive (n=57)	P
Age (Year)	34.80±6.1	35.7±7.3	0.490
Number of previous micro-TESE	1.4±0.7	1.4±0.8	0.910
Operation time (min)	65.1±14.2	40.8±18.2	<0.001*
Number of collected tubules	38.6±14.8	23.4±14.0	<0.001*
BDI scores	5.1±4.8	5.9±6.0	0.867
STAI scores	40.6±6.2	41.8±7.4	0.386
TAI scores	44.6±6.2	45.9±7.6	0.395
VAS values	4.5±1.8	2.8±1.8	<0.001*

Table-2: Patients' data according to the outcomes of previous m-TESE. Values were represented as mean (Mann-Whitney U Test, * $p < 0.05$)

	Negative Previous m-TESE (n=22)	Positive Previous m-TESE (n=25)	P
Age (Year)	37.5±6.0	38.2±7.4	0.773
Number of previous micro-TESE	1.4±0.7	1.4±0.7	0.886
Operation time (min)	64.3±14.4	47.5±21.8	0.008*
Number of collected tubules	37.0±15.4	27.2±15.8	0.058
BDI scores	5.8±4.7	5.9±5.4	0.923
STAI scores	40.4±7.5	39.6±7.6	0.701
TAI scores	43.8±8.1	45.8±8.5	0.481
VAS values	4.0±1.6	2.5±1.4	0.002*