

SEXUALITY AFTER 1°-2°-3° GENERATION OF MID-URETHRAL SLING FOR FEMALE URINARY INCONTINENCE.

Hypothesis / aims of study:

To compare the effect on sexual function of three different type of mid-urethral sling for female urinary incontinence, using a validated questionnaire (Female Sexual Function Index [FSFI]) and to evaluate, if the minimal invasivity of the 3rd generation sling could contribute to improve postoperative sexual function.

Study design, materials and methods:

For the aim of this study, we enrolled retrospectively perimenopausal sexually active women, who underwent mid-urethral sling treatment for stress urinary incontinence between July 2008 and July 2009 at the Department of Obstetrics and Gynecology of University in Mainz (TVT, TVT-secur®, MINIARC™, AJUST®) and at the Department of Obstetrics and Gynecology of Insubria in Varese (TVT-O).

Patients were asked to complete a FSFI form, to assess their postoperative sexual function, after a minimum follow-up time of 6 months postoperatively. Patients were divided into 3 groups according to type of sling: TVT, TVT-O and Mini-Sling groups. The results of this questionnaire were compared between patients of these 3 groups.

Results:

During the study period, a total of 73 women accepted to be enrolled and to complete the questionnaire: 30 patient submitted to TVT, 20 patients submitted to TVT-O and 23 patients submitted to Minisling (MINIARC™, AJUST®, TVT-secur®). Patient's characteristics (age, BMI, parity, HRT) were comparable between the three groups. None of all patients reported sexual dysfunctions before surgery. In the follow-up period, no patient reported vaginal erosion/extrusion, shrinkage or mesh infection.

FSFI Domains	TVT (30 pt)	TVT-O (20 pt)	P value
Desire	3.6 (± 1.2)	2.8 (± 0.9)	0.002
Arousal	4.8 (0-5)	3.0 (1-5)	0.005
Lubrication	5.7 (0-6)	3.0 (2-6)	0.007
Orgasm	5.2 (0-6)	3.0 (2-4)	<0.001
Satisfaction	6 (0-6)	3.5 (2-6)	0.008
Pain	6 (0-6)	4 (2-6)	0.03
Full score	30 (2-34.5)	22 (15.4-31)	0.003

FSFI Domains	TVT (30 pt)	Mini-sling (23 pt)	P value
Desire	3.6 (± 1.2)	2.8 (± 1.3)	0.007
Arousal	4.8 (0-5.7)	3.3 (0-5.4)	0.002
Lubrication	5.7 (0-6)	3.0 (0-5.7)	<0.001
Orgasm	5.2 (0-6)	3.2 (0-5.6)	<0.001
Satisfaction	6 (0.8-6)	4.4 (0.8-6)	0.02
Pain	6 (0-6)	2.8 (0-6)	0.002
Full score	30.15 (2-34.5)	23.4 (2-32.4)	0.001

FSFI Domains	TVT-O (20 pt)	Mini-sling (23 pt)	P value
Desire	2.8 (± 0.9)	2.8 (± 1.3)	0.69
Arousal	3 (1.0-5.0)	3.3 (0-5.4)	0.26
Lubrication	3.0 (2-6)	3.0 (0-5.7)	0.28
Orgasm	3.0 (2-4)	3.2 (0-5.6)	0.87
Satisfaction	3.5 (2-6)	4.4 (0.8-6)	0.62
Pain	4.0 (2-6)	2.8 (0-6)	0.07
Full score	22.0 (15.4-31.0)	23.4 (2-32.4)	0.28

Interpretation of results:

Our data show that the patients after retropubic TVT have a significant better sexual function in comparison to patients after TVT-O, in all domains of FSFI.

Also after TVT the scores for sexuality were higher in comparison to patients submitted to Mini-slings. Instead TVT-O does not seem to be of benefit for sexual function in respect to Minisling.

Concluding message:

From our preliminary data, we can conclude that 3rd generation mid-urethral slings do not seem to improve postoperative sexual function in comparison to classic retropubic and transobturator slings.

Regarding the different investigated slings, TVT seems superior in terms of sexual postoperative outcome.

<i>Specify source of funding or grant</i>	NONE
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>Is this a Randomised Controlled Trial (RCT)?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Institutional Review Board
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes