

## POST-OPERATIVE COMPLICATIONS OF MID-URETHRAL SLINGS: IS IT POSSIBLE TO USE CLAVIEN'S CLASSIFICATION?

### Hypothesis / aims of study

In the current study, grading of post-operative complications after mid-urethral sling surgeries based on Dindo-Clavien's classification is provided.

### Study design, materials and methods

Pub Med search for post-operative surgical complication after midurethral sling was carried out. Reported complications were stratified according to Dindo-Clavien's classification (1). Resultant classification of "sling-related complications" was applied on 160 females who underwent 3 different procedures of mid-urethral slings (TVT, TOT and autologous fascial sling) and followed with minimal follow up 24-months.

### Results

Post operative complications were graded into 5 categories of Dindo-Clavien classification (Appendix-1). The mean±SD age at time of surgery was 46±7 years. TVT was carried out in 75 (47%) patients, TOT in 40 (25%) and fascial sling in 45 (28%). Concomitant prolapse repair was carried out in 20 (12.5%) patients. Post-operative complications are enlisted (table-1). One patient (2.5%) in TOT group and 4 patients (8%) in Fascial sling group had two concomitant complications.

### Interpretation of results

Post-operative urine retention and de novo urgency were the most prevalent complications in fascial sling arm, while thigh pain was the most frequently reported complication after TOT. Life threatening vascular injury was serious complication in TVT cases.

### Concluding message

Post-operative complications of mid-urethral sling could be graded according to Clavien's classification. TVT can cause serious life threatening complication.

### Appendix 1: Grading of Post Operative Complications:

Grade	EVENT
<b>I</b>	<ul style="list-style-type: none"> <li>• Superficial wound infection</li> <li>• Prolonged catheterization (up to one week) either due to intraoperative injury or post operative urine retention.</li> </ul>
<b>II</b>	<ul style="list-style-type: none"> <li>• Hemorrhage requiring blood transfusion,</li> <li>• De novo urgency</li> <li>• UTI</li> <li>• Erosions/extrusions treated conservatively</li> <li>• Thigh /groin pain treated conservatively</li> <li>• Urine retention treated by CIC</li> <li>• Dyspareunia not affect sexual life</li> </ul>
<b>III</b> <b>A</b>  <b>B</b>	<ul style="list-style-type: none"> <li>• Intervention not under General anesthesia</li> <li>• Erosions/extrusions treated surgical y</li> <li>• Thigh/groin pain treated by tape excision</li> <li>• Urine retention treated by tape excision</li> <li>• Intervention under General anesthesia</li> </ul>
<b>IV</b> <b>A</b>  <b>B</b>	<ul style="list-style-type: none"> <li>• Dyspareunia affect sexual life</li> <li>• Hemorrhage causing shock , ICU admission ±exploration</li> <li>• Bowel perforation</li> </ul>
<b>V</b>	<ul style="list-style-type: none"> <li>• Mortality</li> </ul>

Table-1: Reported complications per mid-urethral sling:

Complication	Grade	TVT (%) NO:75	TOT(%) NO:40	Fascial sling(%) NO:45
<ul style="list-style-type: none"> <li>• Prolongation of catheter</li> <li>• Wound Infection</li> </ul>	I	8 --	5 --	15 2
<ul style="list-style-type: none"> <li>• Suprapubic/Thigh pain</li> <li>• De novo urge</li> <li>• Erosion treated medically</li> <li>• Dyspareunia</li> <li>• CIC</li> </ul>	II	-- 8 1.3 -- --	10 2.5 -- -- --	4 15 -- 2 2
<ul style="list-style-type: none"> <li>• Retention and dilatation</li> </ul>	III A	--	5	2
	III B	--	--	--
	IV A	--	--	--
<ul style="list-style-type: none"> <li>• Vascular injury</li> </ul>	IV B	1.3	--	--
<ul style="list-style-type: none"> <li>• Mortality</li> </ul>	V	--	--	--

**References**

- 1- Dindo D, Demartines N, Clavien P (2004) Classification of surgical complication. A new proposal with evaluation in a cohort of 6336 patients and results of a survey. Ann. Surg. 240: 205-213.

<b>Specify source of funding or grant</b>	<b>Institutional : Urology and Nephrology Center. Mansoura University</b>
<b>Is this a clinical trial?</b>	<b>Yes</b>
<b>Is this study registered in a public clinical trials registry?</b>	<b>No</b>
<b>Is this a Randomised Controlled Trial (RCT)?</b>	<b>No</b>
<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>Yes</b>
<b>Specify Name of Ethics Committee</b>	<b>Local Ethical Committee: Urology and Nephrology Center, Mansoura University</b>
<b>Was the Declaration of Helsinki followed?</b>	<b>Yes</b>
<b>Was informed consent obtained from the patients?</b>	<b>Yes</b>