

MID URETHRAL SLINGS AND PUBO URETHRAL LIGAMENTS: AN ANATOMIC COMPARISON

Hypothesis / aims of study

The mid urethral slings (TVT and similar) have been popularized by Petros and Ulmsten. According with their Integral theory of continence the slings should be the replacement of the pubo urethral ligaments (PULs) and they should act as a fulcrum for the pubococcygeus muscle contraction. This assertion has never been confirmed. The aim of this study is to assess anatomic similarities and differences between two different types of mid urethral slings (TVT and TOT) and the PULs.

Study design, materials and methods

20 fresh female cadavers has been selected. TVT and TOT procedure has been carried out on 10 cadavers each. Afterward cadaveric dissection on the pelvis has been performed focusing on the relationship between sling and PULs. Images and systematic description of the structures have been collected. Critical analysis of the results has been carried out by two different urogynecologists.

Results

	PUL	TVT	TOT
Angle with coronal urethral axis	90°	60-70°	30-40°
Relationship with urethral diameter	Contact with superior half (from 9 to 3 o' clock)	Contact with inferior half (from 3 to 9 o' clock)	Contact with central part of the inferior half (from 5 to 7 o' clock)
Angle with sagittal urethral axis	0°	60-70°	80-90°
Relationship with pubic symphysis	Below	Behind	Behind

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ion and relationships of the PULs seem to be different than the mid urethral slings and therefore at least from an anatomic standpoint the midurethral slings are not a replacement of the PULs.

<i>Specify source of funding or grant</i>	No collaboration
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	Family Informed consent
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No