

DOES TRANSOBTURATOR TAPE PROCEDURE AFFECT WALKING?: A PROSPECTIVE STUDY WITH 3D COMPUTERIZED GAIT ANALYSIS

Hypothesis / aims of study

Transobturator tape procedure is performed by the blind needle passage through the obturator foramen. This blind manner of needle passage may cause injury to the fascias, muscles and nerves in the obturator fossa [1]. Therefore, the procedure may affect these patients' walking. However, no study has been performed yet to explore this condition.

Study design, materials and methods

This prospective study included 7 women (mean age: 48.5 range 34-60) who underwent outside-in transobturator tape (TVT-O) procedure by the same surgeon, using a commercial sling material for stress urinary incontinence. All subjects underwent 3D computerized gait analysis pre- and 3 weeks postoperatively to determine a possible effect of the surgery on walking. The kinematic parameters related to the surgery (maximum hip adduction and abduction, anterior pelvis tilt, maximum hip extension and flexion, pelvic rotation) [2] were analyzed and compared by an experienced specialist on physical therapy and rehabilitation. The only exclusion criterion was the presence of any neurological disorder.

Results

The comparisons of the kinematic parameters investigated did not show any statistically significant difference. This study was limited in sample sizes and by the lack of electromyographic study.

Interpretation of results

TVT-O does not affect women's walking by the 3D computerized gait analysis.

Concluding message

Our prospective study demonstrated that TVT-O, by performing with a blind needle passage, does not cause any gait disturbances and thus it is a safe procedure in terms of walking, by the findings obtained with 3D computerized gait analysis.

References

1. Mellier G, Mistrangelo E, Gery L, Philippe C, Patrice M. Tension-free obturator tape (Monarc Subfascial Hammock) in patients with or without associated procedures. *Int Urogynecol J Pelvic Floor Dysfunct.* 2007;18 :165-72.
2. McMulkin ML, Gordon AB. The effect of static standing posture on dynamic walking kinematics: comparison of a thigh wand versus a patella marker. *Gait Posture.* 2009;30 :375-8.

Specify source of funding or grant	NONE
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	GATA Local Ethic Committee, GATA, Ankara, TURKEY
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes