EFFECTS OF LUMBAR LORDOSIS AND PELVIC INLET ORIENTATION ON THE OUTCOME OF THE TRANSOBTURATOR TAPE SLING OPERATION IN WOMEN

Hypothesis / aims of study
To determine the association between the changes in lumbar lordosis and/or pelvic inlet orientation and the outcome of transobturator tape (TOT) sling procedure.

Study design, materials and methods
The study population consisted of 70 patients who underwent TOT sling procedure for stress urinary incontinence and were evaluated by stress test at the 6th month after the surgery. The women were defined as continent on the absence of both subjective complaint of leakage and objective leakage on stress test performed. All other cases were considered incontinent. With the use of a standardized protocol, lateral lumbosacral spine/pelvic x-rays were taken while the participants standing in their usual upright posture with their hands kept at chest level. From these x-rays, the angle of lumbar lordosis and pelvic inlet were measured.

Results
Of 70, 42 were continent and 28 were incontinent according to the evaluation done at the 6th month after the TOT procedure. There were no significant differences with respect to age, body mass index, gravidity, vaginal parity, pelvic organ prolapse, and comorbid diseases between the continan and incontinan groups. The mean angle of pelvic inlet in the continent group (34 degrees; range: 20-50) was significantly lower than in the incontinent group (37 degrees; range: 28-60) (p:0,012). There was no significant difference in the median angle of lumbar lordosis (32 degrees; range: 15-50 in continent group, 34,5 degrees; range: 21-56 in incontinent group, p:0,13) between the two groups.

Interpretation of results
Angle of PI is more important than angle of LL on deflecting the downward intra-abdominal forces towards the pubic bone and rectus abdominis muscles before they reach the pelvic floor.

Concluding message
Women with continence after the TOT sling procedure have lower angle of pelvic inlet than women with incontinence.