Hypothesis / aims of study: To compare the efficacy of the TVT and TRT in the young and menopausal and post menopausal population affected by SUI.

Study design, materials and methods: In the period between 01/01/2006 and 31/03/2007 we have evaluated (ICS evaluation system), cured and observed in follow up 26 patients affected by SUI. We divided them in two groups:
group 1: 9 young patients (34.6%; 24-47 yo; average 35.5 years); group 17 menopausal and postmenopausal patients (65.4%; 48-80 yo; average 64.0 years). All patients had no gynaecological operations, no hormonal disorder (systemic HRT or fitoestrogen in whom possible), no collagen disease, no smokers, no uterine prolapse.
Group 1 underwent to TRT operation and group 2 to TVT operation. We observed the two groups at 1 – 3 – 6 – 12 months of follow up, performing stress test, flowmetry, post voiding residual (PVR) and subjective and objective continent questionnaire.

Results: Group 1: at all the follow up this group had no evidence of unsuccessfull treatment, only 1 patient (11.1%) needed a better fixing of the system at 1 month in office. Group 2: 4 patients (23.6%) underwent to the operation of removal of the TVT, of these patients 1 (5.9%) with erosion, 3 (17.6%) with voiding dysfunction. 13 patients had no problem in all the follow up times. About the subjective and objective continence: group 1: 8 patients (88.9%) have subjective and objective continence, 1 patient (11.1%) have no subjective continence at all. Group 2: 2 (15.4%) of the 13 patients without problems had only objective continence, 6 (46.1%) only subjective continence, and 5 (38.5%) had subjective and objective continence.

Interpretation of results: At first sight the results of the TRT appear better than the TVT’s results: stress test, flowmetry and post voiding residual (PVR) have much difference between group 1 and 2: erosion and voiding disfunction (4 patients, 23.6%). Subjective and objective continent questionnaire are sensible different in the 2 groups. These, probably, have a hormonal implication and an age correlated perception.

Concluding message: Further studies are needed to a better comprehension of SUI in young women, the age correlated incontinence “feeling”, and witch is the better surgical way to cure SUI.

FUNDING: 1° Clinica Ostetrica e Ginecologica Policlinico Universitario - Ambulatorio di Uroginecologia - DACTI
CLINICAL TRIAL REGISTRATION: This clinical trial has not yet been registered in a public clinical trials registry.
HUMAN SUBJECTS: This study did not need ethical approval because already approved in other study in surgery but followed the Declaration of Helsinki Informed consent was obtained from the patients.