Hypothesis / aims of study
Since last decade mid-urethral slings became a standard treatment for female patients suffering stress urinary incontinence. Nowadays there is a general tendency to minimize even minimally invasive procedures. During last years many mini slings were presented to the market. The aim of the study was to evaluate preliminary results of Ophira mini sling in patients with mixed urinary incontinence with predominant stress component.

Study design, materials and methods
Unlike to other single incision slings, Ophira has an unique edge fixation system, which is fishbone like. It allows the sling to be fixed well in the tissues, even when the margins of the harpoons are not penetrating obturator membranes.

Thirty female patients suffering mixed urinary incontinence (MUI) with predominance of stress incontinence were operated with Ophira mini sling. Three of them (10%) developed SUI after prolapse repair. Stress urinary incontinence confirmed by positive cough test during physical examination was inclusion criteria for this study. Associated urgency symptoms were present in 29 patients from 30 before surgery (96.67%). Urodynamic stress urinary incontinence was proved in all cases. 12 patients (40%) showed terminal detrusor overactivity during cystometry. Visual analog scale (0 to 10) was utilized for evaluation of patients’ subjective response to the treatment. Stress cough test was used as objective measure of surgery efficacy.

Results
Mean age of the patients was 62 +8.6 years (from 44 to 81). Eight women (26.67%) had a history of previous genital surgery. Follow up visits were done in 1 month and 12 months after surgery. Two patients were lost for follow up (6.67%). Cough test was negative in 26 patients from 28 (92.86%) after 12 months following surgery. In twelve months after the surgery the urgency symptoms were resolved in 40,74% of patients (11 patients from those 27 with pre-operative urgency, who were available for follow ups). Other patients were managed with anti-muscarinic medications. Twenty three (82.14%) patients were satisfied by surgery according visual analogue scale. Only three patients were not satisfied with results of their treatment. Two of them have a recurrence of stress urinary incontinence and one with urgency urinary incontinence. Dispareunia after the surgery was reported in 2 cases (7.14%) and UTIs reported in 3 patients (10.71%).

Interpretation of results
We have found high objective and subjective cure rates in treatment of mixed urinary incontinence with predominance of stress symptoms operated with Ophira single incision sling. Subjective efficacy reached as much as 82.14% within 12 months after the surgery. Most of the patients showed negative stress cough test (92.86%). Urgency symptoms disappeared in almost 40% of patients.

Concluding message
Ophira mini sling is an effective and safe method for treatment of female MUI. It has an unique fixation system that results to high efficacy rate in 12 months follow up. This method may be used effectively for treatment of patients suffering stress urinary incontinence with urgency symptoms. Further investigations are necessary for evaluation of long term efficacy.