OBJECTIVES: To assess the outcome of a single incision, minimal invasive Miniarc-sling in the treatment of female stress urinary incontinence (SUI) and report the intraoperative and postoperative complications.

METHODS: From February 2008 to December 2009, 43 consecutive patients with SUI were surgically treated with Miniarc-sling at our institution. Preoperative variables for all patients were reviewed, including age, severity of incontinence, body mass index (BMI) and previous pelvic surgery. All patients answered a standardized questionnaires before and 6 months after the surgery. Quality of life (QoL) assessment was carried out with use of the International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form (ICIQ-UI SF).

RESULTS: The mean patient age was 61.69 years, with a mean BMI of 27.95. The ICIQ questionnaire symptom scores before and after the surgery was 14.97 points and 4.2 points respectively. Improvements were in 39 patients, one case of worsening and 3 patients without improvement. In 10 cases a simultaneous correction of pelvic organ prolapse was performed. A tendency no statistically significant was observed in the patients without previous pelvic surgery; this group improves clinically in comparison with previous pelvic surgery group (Table 1). There were no major perioperative complications. Vaginal mesh erosion occurred in two patients; of these patients one had systemic lupus erythematosus (SLE).

CONCLUSION: Our short-term clinical results suggest that the MiniArc® is a safe and effective minimally invasive sling procedure for the treatment of female SUI with low morbidity and can be used in patients with concomitant pelvic floor disease.