

P346. Efficacy and safety of robotic-assisted apical lateral suspension for the treatment of high grade pelvic organ prolapse: short and medium follow up

E Malacarne (IT) [1], A Giannini (IT) [2], E Russo (IT) [3], P Mannella (IT) [4], T Simoncini (IT) [5]

Context: Laparoscopic abdominal sacral hysterocervicopexy (ASC) is the gold standard for the treatment of high grade apical prolapse but it's highly invasive: dissection of sacral promontory may be difficult and it can expose the patient to potentially life-threatening complications. Laparoscopic apical lateral suspension (ALS) to the abdominal wall is an alternative and feasible procedure, also when performed by robotic assistance, as we previously described in our early experience of forty cases.

Objective: The aim of the present study is to investigate short and medium anatomical and functional outcomes of robotic-assisted ALS with the use of a titan-covered T-shaped mesh.

Methods-patients-interventions: This is a retrospective observational study concerning clinical perioperative, short and medium-term outcomes of the first series of robotic-assisted ALS performed in patients with high grade symptomatic anterior and apical pelvic organ prolapse. From September 2014 to September 2017 we performed 85 robotic-assisted ALS.

Outcome measures: Clinical evaluation of patients was performed at 1, 6, 12 and 24 months using simplified POP quantification system. Surgical complications were scored according to the Clavien-Dindo classification. The Incontinence Impact Questionnaire 7 (IIQ7) and POP-related quality of life Questionnaire (P-QOL) were used to assess the improvements of POP- and incontinence-related quality of life.

Results: All the procedures were performed with the same technique using the da Vinci Si or Xi systems and were completed without complications. 1 month after surgery prolapse was successfully resolved in all patients with significant improvement of symptoms. 73 patients were evaluated at 6 months and anatomical cure rate was 99% for the apical and 91% for the anterior compartment. 53 patients were evaluated at 12 months and anatomical cure rate was 98% for the apical and 96% for the anterior compartment. 40 patients were evaluated at 24 months and anatomical cure rate was 100% for the apical and 83% for the anterior compartment.

Conclusions: Robotic-assisted ALS is a safe and effective procedure for the treatment of advanced apical and anterior defects, as evidenced at a short and medium follow up. It's highly reproducible, and represents a feasible alternative to ASC especially for surgeons with a moderate experience of the promontory access.

[1] Department of Experimental and Clinical Medicine, Division of Obstetrics and Gynecology, University of Pisa, Italy, [2] Department of Experimental and Clinical Medicine, Division of Obstetrics and Gynecology, University of Pisa, Italy, [3] Department of Experimental and Clinical Medicine, Division of Obstetrics and Gynecology, University of Pisa, Italy, [4] Department of Experimental and Clinical Medicine, Division of

Obstetrics and Gynecology, University of Pisa, Italy, [5] Department of Experimental and Clinical Medicine, Division of Obstetrics and Gynecology, University of Pisa, Italy