

## ROBOT-ASSISTED LAPAROSCOPIC HYSTEROSACROPEXY FOR PELVIC ORGAN PROLAPSE

### Introduction

Pelvic organ prolapse (POP) surgery can be performed either transperineally or transabdominally. The individual woman's surgical history and goals, as well as her individual risk for surgical complications, prolapse recurrence and de novo symptoms impact the selection of surgical route. Transabdominal repairs are the most common surgical procedures for POP and are associated to recurrence rates up to 10%, whereas transperineal approaches are reported to be a source of higher recurrence rates. Transabdominal procedures can be performed either by laparotomy or by laparoscopy. Recently several series have reported that laparoscopic approach to treat POP (with or without robotic assistance) is feasible and safe with good short and intermediate-term results, comparable to open approaches. This paper describes the technical aspects of robot-assisted laparoscopic hysterোসacropexy (RALHSP) using the da Vinci surgical system.

### Design

Since 2006, 10 consecutive patients with POP (mean age 54.5 years), who wished to preserve the uterus, underwent RALHSP as single reconstructive procedure. Two surgeons performed all procedures with the same technique. All complications were collected at a 90-day follow-up using the standardised Clavien classification system. The following outcomes were evaluated: operative time, blood loss, complications, in hospital stay, catheterization time, cure rate. The surgical steps were: bilateral dissection of the perimetrium; identification and extraperitonealization of the uterine cervix; incision of the peritoneum at presacral level and distal to the cervix; placement of a 20 x 2.5 cm polypropylene mesh, willing to embrace the cervix, secured to the anterior longitudinal sacral ligament with 0 Tycron stitches; mesh extraperitonealization.

### Results

All procedures were performed successfully using the Robot-assisted approach. No additional reconstructive procedures were thought to be necessary at the end of surgery. The mean operative time was 103 minutes; the mean blood loss was 18 mL. Neither intra- nor major post-operative complications occurred. According to the Clavien classification system, 4 patients (40%) had grade 1 early complications (two nausea episodes, two electrolyte disturbance); and one patient (10%) had grade 2 complication (diarrhoea). At a mean follow-up of 9.3 months all patients declared themselves satisfied with the anatomical and functional results achieved.

### Conclusion

RALHSP represents an effective option for the management of POP in selected women who wish to preserve the uterus. Moreover da Vinci robotic system allows performing similar procedures to those performed by standard laparoscopy or laparotomy without increasing the morbidity rate when compared to standard laparoscopy, and allows the same functional results.

### Disclosures

**Funding:** No source of funding nor grant **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** It is an observational study within routine clinical practice requiring only a notification letter without ethics committee approval **Helsinki:** Yes **Informed Consent:** Yes