

# **SURGICAL AND FERTILITY OUTCOMES OF REDUCED-PORT ROBOTIC MYOMECTOMY; A SINGLE-CENTER EXPERIENCE OF 401 CASES**

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## **Abstract Body**

**Purpose/Background:** The purpose of this study was to evaluate the surgical and fertility outcomes of reduced port robotic myomectomy (RPRM) as fertility-saving surgery using Da Vinci® Xi™.

**Methods:** A total of 401 patients who underwent RPRM by single operator between October 2017 and October 2021 in a tertiary hospital were enrolled. For RPRM, three ports are required; 1.5cm umbilical incision and two 0.8cm incisions 8cm lateral to umbilicus. Through umbilicus a glove port was applied, which was used for scope entry, insertion and removal of suture materials and small specimens. Through lateral ports tenaculum forceps, bipolar and monopolar forceps, and needle drivers were used. Fertility outcomes were assessed through medical records review and follow-up telephone contact.

**Results:** The mean age of patients at the time of surgery was  $39.7 \pm 6.0$  years. The most common indication for surgery was menorrhagia (n=128, 31.9%). The average number of myomas removed was  $4.7 \pm 4.1(1-22)$ , and the size was  $7.8 \pm 2.5$  centimeters(2.5-16). The mean operation time was  $103.7 \pm 45.6$  minutes. Postoperative complication was found in 9.6%(n=39) of patients, and the most common complication was transfusion (n=31,7.7%). Recurrence rate after the surgery with the follow-up period of 1-5 years was 9.0%(36/401)

After surgery, 50 patients tried to conceive, and 34 became pregnant either naturally or by assisted reproduction(34/50, 68.0%). The mean interval time from operation to conception was  $9.4 \pm 8.1$  months. Except for 10 patients with ongoing pregnancy, 20 live births(20/24, 83.3%) and 4 miscarriages(4/24, 16.7%) were reported. Cesarean section was done for most cases (19/20, 95.0%). Two postpartum complications were noted: remnant placenta and placenta accreta.

**Conclusions:** RPRM, which provides the benefits of conventional robotic surgery along with favorable obstetric and cosmetic results, is a feasible option for patients with symptomatic uterine myomas who wish to conceive in the future.