INTRODUCTION OF REDUCED PORT SURGERY USING HIGUCHI’S TRANSVERSE SMALL INCISION


OBSTETRICS AND GYNECOLOGY, JIKEI UNIVERSITY SCHOOL OF MEDICINE, Japan

[Objective] Laparotomy is performed using Higuchi’s transverse incision procedure, in which the subcutaneous tissue is detached cranially, a T-shaped incision is made in the fascia, and the peritoneum is longitudinally incised while confirming the location of the bladder, in surgery for benign tumors and Caesarean section at our department. We introduced low single-incision laparoscopic surgery (L-SILS) using this technique for benign ovarian tumors and evaluated its usefulness and safety.

[Methods] In 51 patients with benign ovarian tumors who underwent laparoscopic surgery (L-SILS in 22, multi-port surgery in 29) between March and August 2014, the patient background, results of surgery, perioperative complications, and postoperative pain were statistically evaluated. L-SILS was performed by an approach with a small 2-3-cm incision on the upper margin of the pubis using Higuchi’s transverse incision procedure. Postoperative pain at rest and on movement was evaluated using a visual analogue scale (VAS).

[Results] The mean tumor diameter was 9.94 (4.0-30.0) cm in the L-SILS group but 7.06 (4.2-10.0) cm in the multi-port surgery group, with a significant difference (p=0.018). The mean operative times were 112.9 (72-150) and 136.6 minutes, respectively, being significantly shorter in the L-SILS group (p=0.017). No significant difference was noted in the postoperative pain, volume of hemorrhage, complications, or duration of hospitalization.

[Conclusion] While this procedure is performed through a very small incision at the upper margin of the pubis, injury of the bladder can be invariably avoided, and an excellent esthetic outcome can be achieved as the surgical wound is concealed by pubic hair. In addition, the procedure was suggested to be effective for the treatment of vary large tumors as well as equally safe or even safer compared with conventional procedures.