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Editorial

Is it possible to use laparoscopy to perform a cystectomy for large ovarian cysts?

Laparoscopic surgery has gained global popularity since 1980 and has also become one of the most important procedural advances in the field of surgery.[1] There is no doubt that there is still a big gap between awareness of the technique and routine practice.[2] A recent review article highlighted the value of the academic activities launched by the minimally invasive surgery-related medical associations, because these educational programs significantly lower the threshold for gynecologists entering the field of laparoscopic surgery.[3] Many advanced technologies, including robotic, single-incision and natural-orifice laparoscopic surgeries have further caught the attention of patients and surgeons,[4–6] resulting in the observation that the majority of "benign" ovarian tumor surgeries have been performed using laparoscopy in Taiwan.[3] However, concerns about malignancy, especially of ovarian origin, and difficulty in the management of complicated tumors are still the biggest challenges in performing laparoscopic surgery. When discussing the use of laparoscopic surgery in place of conventional laparotomy, opponents mention the potential risks of laparoscopic surgery, including incomplete excision, the lack of a safe margin for tumor excision, and the tendency to recur. Also, there are questions regarding curable diseases and the possibility of the occurrence of dangerous and catastrophic widespread tumor seeding,[7–9] although some physicians are still confident in their belief that laparoscopy is a viable option in the management of the majority of patients with gynecologic diseases, including ovarian tumors and even ovarian cancers.[10,11] The current literature defining the role of laparoscopy in the diagnosis and treatment of ovarian cancer is limited to case reports, case series, and cohort studies; these limited studies suggest laparoscopy has an efficacy equal to laparotomy in both early- and advanced-stage ovarian cancer.[10] When considering the balance between risks and benefits, the majority of patients are still satisfied with laparoscopic surgery compared to conventional surgery.[11]

Laparoscopic surgery can be completed using one, two, three, four, or five port-wound methods, including one 5-mm or 10-mm umbilicus port wound (or the new single 20-mm multichannel port) and other ancillary port wounds, ranging from 2.5 mm to 20 mm. In the first issue of *Gynecology and Minimally Invasive Therapy*, Su and colleagues contributed an interesting article in which they described using a transumbilical single-site laparoscopy with a subsequent ultraminilaparotomy mode at the same transumbilical vertical incision in the successful management of three patients with large ovarian tumors (over 26 cm in diameter).[12] The authors used the following strategies to overcome the potential concealed dangers in completing the surgery: (1) a 2-cm vertical incision in the umbilicus; (2) a thorough inspection of the gross tumor and then the entire abdominal cavity using laparoscopy to exclude possible malignant lesions; (3) the use of a purse-string opening and suction to decompress the ovarian cyst under the protection of the wound retractor to avoid contamination by the spilled contents.

We congratulate the authors for successfully dealing with these complicated cases without any reported adverse events. We are always happy to learn of any new technique or delicate surgery [13] that seems to be logical and easily performed. These new techniques can overcome the limitations, and minimize the expense and painful suffering of laparoscopic surgery in managing adnexal tumors. We also agree that the so-called transumbilical single-site laparoscopy with ultraminilaparotomy mode – the incision is performed at the same transumbilical port wound, can help us remove tumors easily. This ultraminilaparotomy is based on using a natural orifice instead of our original design with a modified Pfannenstiel incision or midline vertical incision,[14,15] that might provide more advantages cosmetically or possibly in postoperative recovery. Of course, any idea needs more practical experience to gain wider approval. We are looking forward to seeing more discussion about the concept that laparoscopic surgery is an appropriate method for managing adnexal tumors.

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