

稿件編號：OE1	<p>腹腔鏡併腹部超音波導引子宮肌腺症微波消融手術之初步結果報告</p> <p>Laparoscopy combined with transabdominal ultrasound-guided percutaneous microwave ablations for symptomatic adenomyosis: preliminary results</p>
臨時稿件編號：1499	<p>林雅翠¹ 許鈞碩¹ 大林慈濟婦產部¹</p>
論文發表方式：口頭報告	<p>Objective: To evaluate the efficacy and safety of laparoscopy combined with transabdominal ultrasound-guided percutaneous microwave ablation (PMWA) for treating symptomatic adenomyosis.</p>
論文歸類：內視鏡	<p>Introduction: Adenomyosis is a common gynecological disorder in reproductive-aged women, causing severe dysmenorrhea, menorrhagia, anemia, and infertility. It has a significant impact on both the physical and mental health of women. Due to the suboptimal outcomes of traditional medical and surgical treatments, an increasing number of patients are seeking more effective and less invasive therapies. Since around 2010, percutaneous microwave ablation (PMWA) has been widely performed for symptomatic uterine lesions in China and Japan. In this procedure, a needle is inserted into the target lesion under ultrasound guidance, and the microwave-heated center rapidly reaches temperatures above 60°C to coagulate the tissue. In our department, Dr. C.S. Hsu has performed laparoscopy combined with transabdominal ultrasound-guided PMWA for symptomatic adenomyosis. We evaluated the patients' symptoms using a questionnaire and assessed the reduction in lesion volume via pre-operative and post-operative transabdominal ultrasound.</p> <p>Methods: Patients with symptomatic adenomyosis were enrolled in this prospective study. They underwent transabdominal ultrasound to measure lesion volume before the operation. The following parameters were collected before the procedure, and at 3, 6, and 12 months post-treatment: uterine volume, hemoglobin (Hb) levels, cancer antigen 125 (CA125) levels, cancer antigen 199 (CA199) levels, symptom severity score (SSS), dysmenorrhea visual analog scale (VAS), Quality of Life Scale (QOLS), and 36-Item Short Form Health Survey questionnaire (SF-36). Adverse events and complications were also recorded to assess clinical efficacy. Patients received general anesthesia and were positioned in the dorsal lithotomy position. A 5-mm trocar was inserted, and a laparoscope was used to examine the pelvic condition. If adhesions were noted, another 5-mm trocar was inserted, and adhesiolysis was performed first. Microwave ablation was done under transabdominal ultrasound guidance throughout the procedure. We would follow up the patient 3 months later with transabdominal ultrasound, questionnaire and laboratory data.</p> <p>Results: Since November 8th, 2023, 20 patients have undergone laparoscopy combined with transabdominal ultrasound-guided PMWA at our department. Of these, 16 patients were followed up for more than 3 months. The average uterine volume reduction rate at 3 months post-operation was 25.55% (ranging from 58.73% to -47.32%). Laboratory data showed a mild increase in mean hemoglobin (10.91 g/dL to 11.83 g/dL, +0.92 g/dL), a decrease in CA-125 (94.18 U/mL to 49.54 U/mL, -44.64 U/mL), and a decrease in CA-199 (45.28 U/mL to 25.7 U/mL, -19.58 U/mL) after 3 months. The symptom severity score decreased from 26.75 to 18.71 (-8.04), the dysmenorrhea VAS decreased from 6.81 to 4.31 (-2.5), the Quality of Life Scale decreased from 106.56 to 69.14 (-37.42) and the SF-36 score increased from 49.53 to 67.24 (+17.71), indicating improving compared to preoperative levels.</p> <p>Conclusion: Laparoscopy combined with transabdominal ultrasound-guided percutaneous microwave ablation is an effective and minimally invasive technique for treating adenomyosis. Further long-term follow-up and a larger sample size are needed for more comprehensive evaluation.</p>

稿件編號：OE2	比較有無利用檢體裝袋下使用高速碎瘤機影響腹腔鏡子宮次全切除術的手術因素 —三級轉診中心的病例對照研究
臨時稿件編號： 1485	<p>Factors Influencing Laparoscopic Subtotal Hysterectomy With or Without In-Bag Power Morcellation: A Case-Control Study in A Tertiary Referral Center</p> <p>林祖薇¹ 吳宛儒¹ 周邦新¹ 許瑞昌¹ 陳子和¹ 彰化基督教醫院婦產部¹</p>
論文發表方式： 口頭報告	<p>Introduction: Laparoscopic supracervical hysterectomy (LSH) offers a surgical option for women with severe adenomyosis, multiple and complex fibroids who require hysterectomy. The removal of specimen is the rate determining step in LSH. However, using high speed morcellators may have the potential of spreading occult tumor. Therefore, in this study, we compared the surgical outcomes of LSH with and without the use of containment system.</p>
論文歸類： 內視鏡	<p>Method: A retrospective study was conducted between January 1, 2022, and April 30, 2024 at Changhua Christian Hospital. Demographic data from the patients and factors that influenced surgical outcomes were collected, including BMI, use of containment systems, previous operation history, preoperative hemoglobin levels, uterine size, complexity of surgery, and hierarchy of assistant. The difference in operation time between groups of LSH with and without bag was also analyzed after controlling for possible confounding factors.</p> <p>Results: A total of 60 patients who underwent LSH were recruited. The median age was 46 years. The most common indication of LSH was symptomatic uterine fibroid (55%). Endometriosis was the only factor associated with longer operating time with an odd ratio of 1.26 (95% CI: 1.05-1.51, p<0.012). No significant learning curve was noted as the scatterplot indicated non-significant relationship between operating time and case numbers (r= -0.121, p value = 0.668).</p> <p>Discussion: Power morcellation had a smaller wound incision (<1.5 cm) and shorter morcellation operative time (MOT) than manual morcellation in bag without increase the complication rates. However, the technique of manipulating the endoscopic bag and direct control of the morcellated tissue to minimize specimen spillage was also rate determining step to reduce MOT. Interestingly, our study showed little definite learning curve for contained power morcellation. No malignancy was reported in the permanent pathology results.</p> <p>Conclusion: Tissue retrieval from the surgical site using power morcellation with containment system may provide the right combination of patient safety, speed, and ease of use, even for less experienced surgeons.</p>

稿件編號：OE3	針對單孔達文西手臂子宮肌瘤及肌腺瘤切除手術，輔以吊頸式止血帶之 100 例手術成果報告
臨時稿件編號： 1366	<p>Surgical Outcomes of 100 Cases: Da Vinci Transumbilical Single-site Robotic Myomectomy and Adenomyomectomy Assisted by Hangman's Tourniquet</p> <p>郭信宏¹ 張紅淇¹ 吳加仁¹ 林菁卿¹ 林瑾蕙¹ 中壢宏其婦幼醫院¹</p>
論文發表方式： 口頭報告	<p>Uterine fibroids or adenomyosis are benign tumors of the uterus that can cause symptoms such as heavy menstrual bleeding, dysmenorrhea, infertility, or compression-related bothers like frequent urination. The standard treatment is hysterectomy; however, for women who wish to preserve their uterus or have future pregnancy needs, uterus-sparing surgery is a feasible alternative.</p>
論文歸類： 內視鏡	<p>Among uterus-sparing surgeries, the most critical step is intraoperative bleeding control. In 2022, Dr. Hsin-Hong Kuo introduced the triple-tourniquet technique (including isthmic and bilateral infundibulopelvic tourniquets, with the isthmic tourniquet also known as the Hangman's Tourniquet or HMT) to reduce intraoperative bleeding. Subsequent comparative studies showed that the tourniquet group had a statistically significant reduction in blood loss and allowed the removal of a greater number of uterine tumors compared to the non-tourniquet group. This report presents a case series study documenting the outcomes of transumbilical single-port robotic myomectomy and adenomyomectomy performed by a single surgeon, Dr. Hsin-Hong Kuo, using HMT between February 1, 2023, and December 31, 2024. The current data (averages) indicate that the total operation time was 125 minutes, console time was 50 minutes, 6.2 tumors were removed, and the specimen weight was 322 grams. These outcomes were achieved using the transumbilical single-port approach with one HMT applied for 7.1 minutes, resulting in an ischemic time of 56 minutes.</p> <p>This report demonstrates the critical role of HMT in transumbilical single-port robotic uterus-sparing surgeries. HMT not only lifts the uterus automatically, eliminating the need for a second assistant during the surgery, but also significantly reduces blood loss, with an average intraoperative blood loss of 202 mL. Furthermore, during the console time, no suction or irrigation was needed, which minimizes instrument collisions, reduces the risk of assistant injury, and greatly enhances surgical efficiency.</p>

稿件編號：OE4	<p style="text-align: center;">新型多關節式器械於複雜性婦科內視鏡手術之應用 Artisential Applied in the complex gynecological Surgery</p>
臨時稿件編號： 1538	<p style="text-align: center;">李易良^{1,2} 白尹瑄^{1,2} 尹長生^{1,2} 武國璋^{1,2} 蕭博緯^{1,3} 三軍總醫院¹ 康寧醫院² 國軍桃園總醫院³</p>
論文發表方式： 口頭報告	<p>Background: Hysterectomy is one of the most common benign gynecological surgery over the world. Hysterectomy is often performed for non-cancerous conditions such as fibroids, bleeding disorders, endometriosis, and uterine prolapse. From 2000 to 2004, 90% of hysterectomies in the United States were for benign diseases, while the remaining 10% were for cancers like uterine, cervical, and ovarian cancer. According to several previously published randomized controlled trials and meta-analyses, laparoscope offers potential advantages in complex gynecological surgery, including shorter hospital stays and improved cosmetic satisfaction compared to conventional explore laparotomy. However, it remains technically challenging with insufficient operating space due to huge uterus or ovarian tumor. These challenges lead to longer operating times and higher conversion rates. To overcome these difficulties, new laparoscopic articulating instruments have been developed as an alternative.</p>
論文歸類： 內視鏡	<p>Purpose: Conventional straight-fixed laparoscopic instruments have disadvantages of reduced dexterity, limited freedom of movement, and uncomfortable ergonomics. Therefore, it was hard for surgeons to get an effective angle and make effective traction and counter-traction during laparoscopic surgery. To overcome these limitations, a surgical robot system, the da Vinci (Intuitive Surgical Inc., Sunnyvale, CA), was developed. Robot system provides high-definition three-dimensional vision with enhanced dexterity, multi-joint instruments, tremor reduction, and comfortable ergonomics. However, it has cost versus benefits issue. A new laparoscopic articulating instrument has multi-joint structure that are synchronized with the surgeon's hand, wrist, and finger movement. With this structure, it can provide 360° of movement. Its multiple degrees of movement allows a wide range of surgical procedures like using a robotic arm. In addition, it has cost-effectiveness compared to robotic surgery. In this video, we intended to show how to overcome internal collision and make a good surgical view through a new laparoscopic articulating instrument during laparoscopic hysterectomy.</p> <p>Materials and Methods: We used the ArtiSential® (LIVSMED Inc., Republic of Korea), a new laparoscopic articulating instrument which is registered as a class I medical device with the Korea Food and Drug Administration in 2019. Also, it achieved USFDA approval in June 2020. The instrument can be used with any 8 mm, or larger, sized trocar.</p> <p>In port placement, we applied the Glove port® (Nelis Corp., Republic of Korea). It consists of three 5-mm-sized ports and one 12-mm-sized port. Therefore, it is possible to freely use a stapling device according to surgeon's preference. The articulating instrument is placed on the left side, with surgeon's non-dominant hand.</p> <p>Results: In this video, we presented the steps of laparoscopic hysterectomy using a new laparoscopic articulating instrument.</p> <p>Conclusions: Laparoscopic gynecological surgery using a new laparoscopic articulating instrument (ArtiSential®) is safe and technically feasible. Furthermore, it can be applied in various abdominal surgeries requiring a wider range of movement.</p>

稿件編號：OE5	<p>門診子宮鏡檢查疼痛感受的影響因素：344 名患者的回顧性研究 Factors Influencing Pain Perception During Office Hysteroscopy: A Retrospective Analysis of 344 Patients"</p>
臨時稿件編號：1556	
論文發表方式：口頭報告	<p>陳欣儀¹ 王錦榮¹ 林口長庚醫院婦產科¹</p>
論文歸類：內視鏡	<p>Introduction Office hysteroscopy offers convenience, shorter procedure times, and reduced anesthesia-related risks compared to operative hysteroscopy. However, increased pain perception remains a significant concern. This study aimed to identify specific patient characteristics associated with higher pain levels during office hysteroscopy.</p> <p>Methods This retrospective, single-center study analyzed 344 patients who underwent office hysteroscopy without anesthesia between August 2024 and November 2024. Patients were categorized into two groups based on their pain perception: those experiencing significant pain (VAS \geq 4) and those with minimal or no pain (VAS $<$ 4). The study examined the associations of age, body mass index (BMI), primiparity, primigravidity, history of vaginal delivery, menopausal status, uterine axis alignment, and dysmenorrhea with pain levels reported during the procedure.</p> <p>Results Physiological factors influencing pain perception during office hysteroscopy were assessed in 344 patients. No significant differences were observed in baseline characteristics, including age, history of cesarean delivery, or menopausal status, between the two groups. However, significant associations were identified between pain perception and the following factors: a BMI below 18 ($P = 0.01$), primiparity ($P < 0.01$), primigravidity ($P < 0.01$), extreme uterine axis deviation ($P < 0.01$), absence of a history of vaginal delivery ($P < 0.01$), and dysmenorrhea ($P < 0.01$).</p> <p>Conclusion This study highlights potential associations between a BMI below 18, primiparity, primigravidity, extreme uterine axis deviation, absence of a history of vaginal delivery, and dysmenorrhea with pain experienced during office hysteroscopy. Further research with larger datasets and prospective studies is required to validate these findings and enhance clinical understanding.</p>

稿件編號：OE6	<p>主要肌瘤直徑與腹腔鏡肌瘤切除術圍手術期併發症可能性之間的關係:一項回顧性世代研究</p>
<p>臨時稿件編號： 1596</p>	<p>Diameter of dominant myoma associated with the possibility of perioperative complication of laparoscopic myomectomy: a retrospective cohort study</p> <p>朱羽群¹ 丁大清¹ 花蓮慈濟醫院婦產部¹</p>
<p>論文發表方式： 口頭報告</p>	<p>Objective This study aimed to establish the dominant myoma diameter threshold associated with increased risk of complications following laparoscopic myomectomy (LM).</p>
<p>論文歸類： 內視鏡</p>	<p>Design Retrospective cohort study</p> <p>Setting Single tertiary referral center</p> <p>Patients This study evaluated patients who underwent LM for benign indications at our institution between January 2013 and June 2023. The primary aim was to investigate the association between dominant myoma diameter and 30-day postoperative complications. Patient characteristics, statistical methods, and outcome measures were comprehensively documented. Receiver operating characteristic (ROC) curve analysis assessed the predictive performance of myoma diameter. Statistical significance was defined as $p < 0.05$.</p> <p>Intervention(s) LM</p> <p>Measurements and Main Results The final sample comprised 119 patients, with a mean dominant myoma diameter of 6.52 cm and a 15.13% complication rate. The mean myoma weight was 224.27 grams (n=45). Receiver operating characteristic analysis identified 7.11 cm as the optimal cutoff for predicting complications (AUROC=0.69). Multivariable logistic regression revealed a significant relationship between dominant myoma diameters greater than 7.11 cm and higher complication risk (OR 4.44, 95% CI 1.05-18.66, $P = 0.042$). Myoma-type stratification reinforced myoma diameter's predictive utility. A strong correlation existed between myoma weight and dominant myoma diameter ($r=0.85$, $P<0.001$), supporting the diameter's potential for preoperative myoma weight estimation.</p> <p>Conclusion The dominant myoma diameter emerged as a valuable predictor of 30-day surgical complications following laparoscopic myomectomy (LM). An optimal cutoff of 7.11 cm was associated with a statistically significant increase in complication risk.</p>

稿件編號：OE7	協助子宮肌瘤微創手術術式決斷之預測模型 Development of a myoma score for a patient selection for robotic myomectomy
臨時稿件編號： 1439	張茗涵 ¹ 張路得 ¹ 溫國璋 ¹ 賴鴻政 ¹ 衛生福利部雙和醫院 ¹
論文發表方式： 口頭報告	Objective: Uterine fibroids are the most common benign neoplasms of the uterus. For patients with symptomatic leiomyomas who wish to preserve their uterus or maintain the possibility of future pregnancy, myomectomy is considered the ideal surgical management option. This procedure can be performed using various techniques, including hysteroscopic, laparoscopic, robotic-assisted laparoscopic, or abdominal (laparotomy) approaches. In recent years, the advent of modern minimally invasive surgery has led to an increase in the use of robotic-assisted laparoscopic myomectomy (RALM). However, the question of whether RALM offers superior outcomes compared to traditional laparoscopic myomectomy (LM) or abdominal myomectomy (AM) remains a topic of debate. The aim of this study is to develop a clinical scoring system to help guide the selection of the most appropriate surgical approach for myomectomy.
論文歸類： 內視鏡	<p>Method: In this retrospective study, we reviewed 240 consecutive cases of myomectomy performed using minimally invasive procedures between January 2014 and December 2019 at a single tertiary care center. Among these, 122 cases of RALM were compared with a matched control group of 118 cases of LM. And then, we collected the cases of open myomectomy, laparoscopic myomectomy, robotic myomectomy since 2020 to 2022 in SHH and to validate the myoma score of different operations.</p> <p>Result: The final model included four independent variables— "number of fibroids," "size of fibroids," "type of fibroids," and "location of fibroids"—and was named the Complicated Myoma Score. Based on binary logistic regression, the area under the ROC curve was 75.8%, with a confidence interval of 69.6% to 81.9%, reaching statistical significance ($p < 0.001$). Using the Youden index (which maximizes the sum of sensitivity and specificity), we determined the optimal cut-off point for the probability value to be 0.442, yielding a sensitivity of 83.3% and specificity of 57.8%. If the probability value exceeds 0.442, surgeons are advised to consider robotic-assisted myomectomy (RM) for potentially better clinical outcomes. The model demonstrated a significant difference in the mean probability values between laparoscopic myomectomy (LM) (0.439 ± 0.202), robotic-assisted laparoscopic myomectomy (RM) (0.560 ± 0.205), and abdominal myomectomy (OM) (0.622 ± 0.219) in subsequent validation cohorts.</p> <p>Conclusion: This multivariable prediction model shows promise in guiding surgical decisions for myomectomy. The Complicated Myoma Score offers the potential to stratify myomas based on various parameters. The results also provide statistical evidence supporting the optimal cut-off point. Accurate preoperative assessment can assist clinicians in selecting the most appropriate surgical approach. Further randomized control trial are warranted to assess the utility of Complicated Myoma Score.</p>