稿件編號：OG1

臨時稿件編號：
0468

慢性腎病的子宮內膜癌中增加血清 HE4 值－病例報告

Elevated Serum Human Epididymis Protein 4 in Endometrial Cancer with Chronic Kidney Disease: A Case Report

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論文發表方式：
口頭報告

論文歸類：
一般婦科

Introduction
Recently, human epididymis protein 4 (HE4) has been identified as a biomarker for epithelial ovarian cancer and is also highly expressed in endometrial cancer. HE4 is comprised of two whey acidic protein domains and contains a 4-disulfide core. HE4 is involved in the maturation of sperm, and it is significantly correlated in endometrial cancer with histological grade, stage, lymph node metastasis, myometrial invasion, and cervical involvement, making it a good candidate for use as a diagnostic and prognostic biomarker. However, serum HE4 levels rise with age and renal dysfunction, which may affect the interpretation of results. Herein, we present the HE4 level in an early endometrial cancer complicated with ESRD (End-Stage Renal Disease) and diabetes mellitus (DM).

Case Report
This 55 year-old female, G1P1, having experienced menopause for five years, had hypertension and DM history for 20 years with oral linagliptin (5 mg) per day for treatment. She had undergone hemodialysis due to ESRD, QOD(W 1, 3, 5) for 2 years at an outside clinic. She also had left breast cancer, stage IIIa, received modified radical mastectomy and adjuvant concurrent radiation therapy in 2016, followed by tamoxifen treatment. She developed postmenopausal vaginal bleeding for one month in March 2021, and underwent transcervical resection of the endometrium on April 8, 2021. The pathologic report revealed endometrioid adenocarcinoma, grade 2. A magnetic resonance imaging (MRI) revealed compatible with endometrial cancer, T1aN0Mx, stage Ia, right ovarian teratoma and atrophy of right kidney. At that time, laboratory data showed Hb 10.5 g/dL, HbA1C 8.4%, BUN 53 mg/dL, eGFR 5.7, HE4 2229.5 pmol/L, SCC 4.2 ng/mL, CA125 29.1 U/mL, CEA 4.5 ng/mL on April 27, 2021. Subsequently, she underwent abdominal total hysterectomy and bilateral salpingo-oophorectomy on May 4, 2021. The pathologic report showed tiny residual endometrioid adenocarcinoma, grade 2, pT1aNX, stage Ia and right mature cystic teratoma. Immuohistochemical stain revealed ER(+), PR(+), PMS 2 protein expression(+), MSH 6 protein expression(+), and P53 of wild type staining pattern. She is alive and well without evidence of recurrence. A follow up HE4 on July 6, 2021, showed level still to be elevated to 1808 pmol/L.

Discussion
Although there is growing evidence that HE4 may be useful as a prognostic marker in endometrial cancer, however, several studies have shown that serum HE4 levels are elevated in chronic kidney disease(CKD). Because HE4, as a small molecule secreting protein, can be filtered freely in the glomerulus. Patients with CKD have a decline in renal function, which changes the removal of HE4 in the circulating blood, resulting in increased serum HE4. In addition, the serum HE4 is increased in DM, especially in diabetic kidney disease.

Conclusion
Even serum HE4 is significantly higher in patients with endometrial cancer compared to patients without endometrial cancer, and is associated with a poorer prognosis in high value. However, lower renal function must be considered when interpreting HE4 levels in those with cancer of the endometrium.

稿件編號：OG2

臨時稿件編號：
0397

超音波引導下使用子宮鏡冷刀吸除無性經驗病人之子宮內膜息肉手術

Hysteroscopic removal of endometrial polyps using truclear incisor under ultrasound guidance in nulliparous patients

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論文發表方式：
口頭報告

論文歸類：
一般婦科

Study Objective: To investigate hysteroscopic truclear incisor combined using a small black speculum in nulliparous women with endometrial polyps under abdomen ultrasound with the aim of reducing post-operative pelvic pain.
Design: Retrospective study.
Setting: Gynecology department in a university affiliated hospital.
Patients: Thirty nulliparous women received hysteroscopic removal of endometrial polyps by truclear incisor under intravenous sedation and abdomen ultrasound from January 2018 to November 2021.
Intervention: Operation time and post-operative pelvic pain was assessed by VAS pain score at bed side after 4 hours of recovery.
Measurements and Main Results: The mean age of 30 patients was 36.7± 9.8 years old and one group of 17 patients were operated by using a small black speculum and another of 13 patients were operated by using a medium size of speculum for vaginal procedure. The cervix was dilated with Hegar's dilators up to 3.5mm. Using NaCl 0.9% solution as a distension media, the truclear incisor (Truclear TM system, Smith & Nephew, USA) fitted with 2.9 mm of blade and 5 mm window length under the intrauterine pressure of 100 mmHg at the speed rate of 800 rpm was used for removal of the specimens (video). All surgical procedures were completed without intra-operative complications. The average operation time from intravenous general anesthesia with medication administration to the completed operative hysteroscopy was 15.7 ± 3.2 minutes. Hysteroscopy revealed solitary endometrial polyp in 12 (40.0%) cases and combined submucosa myoma in 3 (10.0%) patients. On site abdomen ultrasound, an intact uterine cavity without fluid retention was seen in all patients. One patient (5.8%) among using a small black speculum had extrauterine ascites complained of pelvic pain (VAS pain score=2). Five patients (38.4%) with using a medium size of speculum had extrauterine ascites and complained of pelvic pain ($P < 0.05$).
Conclusion: Hysteroscopic removal of endometrial polyps using truclear incisor and a small black speculum under sono guidance are associated with lower rates of complications and decrease procedure related pain.

稿件編號：OG3 臨時稿件編號： 0426	超音波造影劑 SonoVue 使用於子宮肌瘤海扶手術的副作用觀察 A prospective study of the safety of Sonovue in enhancing high-intensity focused ultrasound (HIFU) for the treatment of uterine myoma 林瑜萱[1] 吳亮瑩[2] 楊茜雯[1] 應宗和[1] 中山醫學大學附設醫院婦產部[1] 台中榮總放射線部[2]
論文發表方式： 口頭報告 論文歸類： 一般婦科	High-intensity focused ultrasound(HIFU) has become a new option for non-invasive treatment for uterine fibroids. Currently, studies have shown that contrast-enhanced ultrasound agents could not only be used to evaluate the treatment results, but also enhance the ablation effect of HIFU. SonoVue, which contains 8 μL sulphur hexafluoride microbubbles, is widely applied in ultrasound imaging to enhance the echogenicity of the blood, which helps evaluate the efficacy of local ablation therapy. In previous studies, only 0.1% of serious adverse effects had been reported after the use of Sonovue in abdominal ultrasound examination. However, limited data is reported in Taiwan. The aim of this study was to investigate the complication and safety of using SonoVue in enhancing HIFU for the treatment of uterine myoma. We performed a prospective cohort study of patients who underwent HIFU treatment for uterine myoma. A total of 20 patients with uterine myoma were divided into 2 groups, 10 patients with sonovue (A) and 10 patients without Sonovue(B) groups, respectively. The patients chose whether to accept the injection of Sonovue after being informed of the risk. Inclusion criteria were (1) adult women between 20-50 years-old (2) single myoma (3) myoma measured length < 8 cm (4) myoma located at anterior wall (5) complete preoperative assessment of image and laboratory examination. Exclusion criteria were (1) < 20 , or > 50 years-old (2) suspected uterine malignancy (with survey of laboratory data and MRI image) (3) pregnant, or breast-feeding women (4) menopaused woman (5) previous surgical intervention for uterine myoma (6) underlying disease which may cause severe complications or influence the efficacy of treatment. We then followed up the adverse event such as pain in the treated region, sciatic or buttock pain, leg numbness, skin discomfort, vaginal bloody discharge, or visible hematuria during and after the HIFU treatment. Our result showed that there's no increasing side effects in using Sonovue in HIFU treatment than the control group. In conclusion, our data support that SonoVue is safe and effective in treatment of myoma with HIFU therapy.

稿件編號：OG4

臨時稿件編號：
0417

子宮內膜複雜性增生及子宮內膜癌之保守性治療

Conservative treatment for early-stage endometrial cancer and complex atypical hyperplasia: National Cheng-Kung University Hospital single-center experience

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論文發表方式：
口頭報告

論文歸類：
一般婦科

Endometrial cancer (EC) is the most common gynecologic cancer in the United States, and had exceeded 2400 cases annually in the latest Taiwan Cancer registration annual report in 2018. Besides, complex atypical hyperplasia (CAH) is a precursor to endometrioid endometrial cancer, the most common subtype. While most endometrial cancer patients aged around 55 years old, endometrial cancer is striking younger female populations, as the prevalence of cases under 40 years old increased throughout the past few years. As the number of CAH/EC patients desiring to preserve fertility were increasing, evaluation of candidates suitable for conservative treatment became more important.

In the latest NCCN guideline provided criteria for considering conservative treatment, including well-differentiated grade 1 endometrioid adenocarcinoma on dilation and curettage (D&C), disease limited to the endometrium on image study, and absence of suspicious or metastatic disease on imaging. For predicting conservative treatment response, Antonio et al constructed a meta-analysis to evaluate whether expression of estrogen receptor (ER) and progesterone receptor (PR) affects outcome, which showed significant results in levonorgestrel-intrauterine device group. Besides, Antonio et al also presented that longer menstrual cycles and infrequent menstrual bleeding appeared as independent predictive factors for conservative treatment failure in atypical endometrial hyperplasia and early-stage endometrial cancer. Further predictive markers for conservative treatment could be valuable in constructing treatment plans.

Multiple studies provided conservative treatment protocols for CAH/EEC, including megestrol acetate, medroxyprogesterone acetate (MPA), levonorgestrel (LNG) intrauterine device (IUD), aromatase inhibitors (letrozole, anastrozole), analogue of gonadotropin-releasing hormone (GnRH), combined oral contraceptives, lynestrenol, tamoxifen, norethisterone acetate and hydroxyprogesterone caproate. So far, there was no consensus on the regimen for conservative treatment.

In this report, we collected patients diagnosed with complex atypical hyperplasia or early-stage endometrial cancer, and treated with conservative treatment in National Cheng Kung University Hospital. We analyze possible predictive markers, present the data including treatment response as well as fertility outcome.

稿件編號：OG5

臨時稿件編號：
0471

徒手復位治療非懷孕婦女的子宮箝閉-個案報告

Manual reduction for uterine incarceration in non-pregnant women

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論文發表方式：
口頭報告

論文歸類：
一般婦科

Introduction
Uterine incarceration is a rare complication causing acute urinary retention. Pathology such as uterine leiomyoma, pelvic adhesion or congenital Mullerian anomalies may cause the uterus to become entrapped beyond the sacral promontory during uterine enlargement. This induces an retroverted configuration change of the uterine isthmus leading to compression and narrowing of the bladder outlet. It may also cause preterm labor, uterine rupture, and other complications of pregnancy. This condition is, however, often reported in pregnancy and is managed with uterine reduction by manual, colonoscopy, or laparotomy. On the other hand, it may also be managed with Foley placement under expectant management until the suggested delivery time. It is typically reported as a complication of pregnancy and not reported in the literature for non-pregnant women. Here we present two cases of uterine incarceration in non-pregnant women treated with manual reduction.

Case report
Case 1
A 47-year-old woman, G3P3, by vaginal delivery, came to emergency room due to acute urinary retention episodes. She had experienced urinary retention episodes for several days and needed Foley placement, yet the same condition occurred again after removing the Foley tube. It always happened in the morning, with urine volume storage at around 1000 ml. A urologist survey showed no evidence of urinary tract infection, nor urolithiasis—however, it did identify a huge pelvic mass. Thus, she was thereafter referred to the OB-GYN department. She had her regular menstrual period, but with heavy menstrual bleeding which may have caused iron deficiency anemia. She had not had any previous pelvic surgery. She also had no diabetes or other systemic disease.
When present in the OB-GYN OPD, pelvic sonography showed huge a post; wall uterine mass compression to the uterine low segment had caused a retroverted uterine configuration. Hematometra was impressed, too. Pelvic examination showed an upward tracked cervix behind the pubis symphysis. A CT scan showed a uterine mass of 6.7*5.8cm in the posterior uterine wall, an elongated cervix, and a low segment. Pap smear derived a negative result for malignancy. Manual reduction under anesthesia with simultaneous dilatation and curettage was performed due to endometrial neoplasm and should be ruled out. After manual reduction along with keeping prone in the knee-chest position before sleep, as well as scheduled voiding, the urinary retention episodes did nor reoccur for one month, until she had staging surgery for endometrial cancer proved by dilatation and curettage.
Case 2
A 42-year-old female, G2P2, by vaginal delivery, had her regular menstrual period and a history of uterine mass, but without the pelvic surgery history. She had no diabetes or other systemic disease. She came to our clinic several times in one month for urinary retention episodes which needed urethra catheterization. The condition most occurred when trying to void in the morning after waking up. Ultrasound examination showed a post. wall uterine mass of 6.8*5.9 cm causing compression on the low segment of uterus, causing retroverted configuration of the uterus with a distended bladder. Pelvic examination showed an upward tracked cervix behind the pubis symphysis. Manual traction with an Allis clamp on the posterior lip of the cervix with digital lifting on post. fornix was attempted; she could then void in the outpatient clinic. We suggested the prone knee-chest position and scheduled voiding for her without medication, and she exhibited no further urinary retention episodes after that.

Discussion
Uterine incarceration is a rare condition that is mostly reported during pregnancy, in

around 1 in 3000 pregnancies since the second trimester. Any conditions make fundus entrapped in pelvic cavity during the growth of uterus to cause elongation of the cervix, while a further distorted urethra causes urinary retention. Treatment options include manual reduction, exploratory laparotomy for reduction, or expectant management with Cesarean section.
However, reports of uterine incarceration in non-pregnant women are few. Traditionally, urinary frequency is a much more common complaint in gynecology clinics in patient with uterine myoma, which is thought to be related to the direct compression of myomas on the urinary bladder, especially in anterior wall myomas. Myomas located in the posterior wall are believed to cause compression symptoms mainly on pelvic organs such as pelvic vessels or the rectum, causing tenesmus or thrombosis rather than urinary retention. In these two cases, conservative treatment was successfully performed, but Case 1 received staging surgery due to endometrial cancer. Since uterine myoma is the most common gynecologically benign tumor, similar conditions may be underestimated, and conservative treatment may help these patients.

Conclusion
An incarcerated uterus will not only happen during pregnancy, but it is also found in non-pregnant women; conservative treatment still works for these patients.

稿件編號：OG6 臨時稿件編號： 0629	巨大或瀰漫性子宮肌腺症為生育保存做腫瘤減積之創新手術方式—南瓜法 An innovative fertility-preserving reduction surgery with multiple-striped resections and pumpkin-shaped suturing for large or diffuse adenomyosis: the pumpkin method 龔喬昕[1] 龔福財[1] 陳文欣[2] 周鈺敏[1] 蔡慶璋[1] 高雄長庚紀念醫院婦產部[1] 嘉義長庚紀念醫院婦產部[2]
論文發表方式： 口頭報告 論文歸類： 一般婦科	Objective: To demonstrate feasibility and safety of a novel debulking technique in conservative surgery of diffuse adenomyosis Design: Prospective observational study with follow-up > 6 months Introduction: Adenomyosis is classified into focal or diffuse form, and may be associated with infertility. Adenomyomectomy should be considered for those women who desire to preserve fertility or the uterus. The appropriate selection of surgical methods to remove lesions and to repair surgical uterine wall defects friendly remains controversial. Uterus-sparing resection of adenomyosis aims at debulking to the greatest extent, fertility preservation, and avoidance of uterine rupture. Materials and methods: This study recruited women with symptomatic uterine adenomyosis and fertility preservation desire. Main outcome measures included level of serum CA-125 and AMH, magnetic resonance imaging (MRI), and subsequent pregnancy outcomes. Surgical procedure: Adenomyosis should be identified by surgeon's squeezing palpation and preoperative MRI imaging. Multiple parallel straight uterine incisions in a distance of 2 cm were made longitudinally directly over the identified adenomyosis lesions. The depth should afford access to the extent of adenomyosis. Inadvertent extension to the uterine cornua or vessels should be avoided. The striped suspension seromuscular flaps were created by incision below the seromuscular tissue, remaining at least 1 cm of thickness. The upper and lower ends of the flap were still connected to the uterus. The adenomyotic tissues were removed piece by piece by Metzenbaum scissor and electric loop. The lesion should be excised maximally without entrance to the uterine cavity. The suspension seromuscular flaps were anchored to the remaining myometrium underneath by simple interrupted sutures to avoid dead space. The tension-free approximation and closure of parallel longitudinal uterine incisions was performed by mattress sutures. The final appearance of the sutured uterus resembled the pumpkin sculpture by the Japanese artist Yayoi Kusama. (video to be presented) Results: The procedure was performed on 5 patients. Intraoperative blood loss varied from 150 to 1,200 ml. Operative time varied between 229 and 514 minutes. To date, a total of 3 cases completed follow-up for >1 years. CA-125 dramatically declined. AMH reduced in 2 cases whereas elevated in 1 case. Postoperative MRI demonstrated marked regressive change of previous adenomyosis lesions, and adequate thickness of myometrium, though the shape of uterus was elongated. Two cases attempted to conceive, with 1 achieving a successful pregnancy and twin live births. On examination at Cesarean section, the whole uterine wall maintained its thickness without dehiscence. Conclusion: The pumpkin method offers an alternative surgical management of adenomyomectomy. The reconstruction of uterus becomes easy due to the well-organized uterine incisions. The repair between the suspension flaps and remaining myometrium is time-consuming but ensures adequate thickness of the myometrium. Postoperative MRI demonstrated a well-healed uterine wall. The recovered uterus could be able to conceive and gave live birth.

稿件編號：OG8

臨時稿件編號：
0521

預防性輸卵管切除於良性子宮切除手術可能會造成提早停經:回溯性世代研究
Long term effect of opportunistic salpingectomy at time of hysterectomy may cause earlier menopause: a retrospective cohort study

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論文發表方式：
口頭報告

論文歸類：
一般婦科

Objective: Opportunistic salpingectomy (OS) is recommended to be performed concurrently with the hysterectomy for the prevention of epithelial ovarian cancer. We aimed to investigate the correlation between OS and time of menopause in women receiving hysterectomy.

Methods: This is a retrospective cohort study involving 75 women who underwent a hysterectomy from January 2007 to December 2015. Menopause was defined as one of the following conditions: (1) the patients had menopause-related symptoms recorded on the chart in outpatient clinic (2) the patients were under hormone therapy for the menopausal symptoms (3) the serum test showed Follicle-stimulating hormone (FSH) >40 IU/L, estradiol (E2) level <20 IU/L, anti-Mullerian hormone (AMH) was undetectable (<0.05 ng/mL). We used electronic medical records and telephone interviews to obtain the data. We compared the outcome between the two groups, including the age of the surgery, age of menopause, length of time from surgery to menopause.

Results: We included 75 patients in this study. There were 31 patients who performed hysterectomy alone and 44 patients who performed hysterectomy with opportunistic salpingectomy. The duration of surgery to menopause was significantly shorter in the hysterectomy accompanied with the OS group (3.90±3.27 in hysterectomy, 2.59 ± 2.11 in OS, p=0.038). Subgroup analysis showed no significant difference at age <40 years, 40-44 years, and 45-50 years in the OS group. There was no significant difference in the age of the surgery (45.10±3.33 in hysterectomy, 45.43±3.14 in OS, p=0.658), age at menopause (49.00±4.20 in hysterectomy, 48.02±3.84 in OS, p=0.299).

Conclusions: Our study showed hysterectomy plus OS would cause earlier menopause than without OS. The result of our study needs a further large scale of study to prove the phenomenon.

台灣婦產科醫學會 111 年度年會暨學術研討會

論文摘要

稿件編號：OM1

臨時稿件編號：
0611

停經後荷爾蒙治療使用口服馬結合性雌激素相較於雌二醇有較高的出血性中風的風險：人口回顧性世代研究

Menopausal hormone therapy with conjugated equine estrogen is associated with a higher risk of hemorrhagic stroke than estradiol: a retrospective population-based cohort study

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論文發表方式：
口頭報告

論文歸類：
更年期醫學

This study aimed to evaluate the risk of hemorrhagic stroke (HS) in menopausal hormone therapy (MHT) with oral conjugated equine estrogen (CEE) and estradiol (E2) in postmenopausal women in Taiwan. A retrospective cohort study was conducted using the Taiwan National Health Insurance Research Database, population-based healthcare claims dataset. Eligible women, aged 40–65 years, who received HT with E2 and CEE orally were enrolled. The primary outcome was HS. Propensity score matching with menopausal age and comorbidities was used. Cox proportional hazard regression models were used to calculate the incidence and hazard ratios (HRs) for HS. The mean menopausal ages of the E2 and CEE groups were 50.31 ± 4.99 and 50.45 ± 5.31 years, respectively. After adjusting for age and comorbidities, the incidence of HS was 1.24-fold higher in the women treated with CEE than in those treated with E2 (8.06 vs. 6.49/1000 person-years), with an adjusted HR (aHR) of 1.50 (95% confidence interval [CI] 1.04–2.17). Moreover, HT with CEE initiated within 5 years of menopause had a higher HR than E2 (aHR = 1.47; 95% CI 1.01–2.41). In conclusion, HT with oral CEE might be associated with a higher risk of HS than E2 in postmenopausal Taiwanese women. The use of HT with CEE should be cautioned with the risk of HS.