

**[OP-001]****Combined Vnotes and TOT Surgery in the Management of Urogynecological Pathologies**

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**Aim:** Urinary incontinence (UI) is defined as involuntary urine leakage and is a universal medical issue that can significantly affect an individual's quality of life. Stress urinary incontinence (SUI) occurs when abdominal pressure exceeds urethral closure pressure, leading to involuntary urine leakage. This can happen during physical activities such as sneezing, coughing, or exercising. Examples of surgical interventions for uncomplicated SUI include anterior colporrhaphy, retropubic urethropexy (Marshall-Marchetti-Krantz), Burch colposuspension, pubovaginal sling, mid-urethral sling (retropubic approach, transobturator approach, single-incision sling), and bulking agents. Natural orifice transluminal endoscopic surgery (NOTES) is increasingly used in urogynecological procedures. This case presentation aims to support the literature by demonstrating the advantage of vaginal approach in simultaneous contraception, prolapse, and anti-incontinence surgeries in a patient with a posterior compartment defect.

**Case:** The tension-free vaginal tape (TVT) method has been used as a standard minimally invasive method for the treatment of urinary stress incontinence since 1995. In 2001, the transobturator tape (TOT) method, where the tape material is placed through the obturator foramen to avoid complications such as bladder and vascular injuries associated with the TVT method, was introduced. The transobturator approach reduces the risk of injuries to the bladder, bowel, or blood vessels. The goal of rectocele repair is to alleviate symptoms associated with anatomical support defects in the posterior vaginal wall. Instead of classic posterior colporrhaphy, repairing the rectovaginal fascia defect and plicating the uterosacral ligaments (RVF-USL) is the recommended technique. In patients planning prolapse and incontinence surgery, it is important that childbearing is complete. It should be thoroughly explained to patients that pregnancies following surgeries conducted without recommending effective contraception methods can complicate their symptoms.

**Discussion:** A 34-year-old woman, G4P4 (3 SVD, 1 C-section), presented with vaginal widening, SUI, and a desire for sterilization. Pelvic examination showed a positive stress test and grade 2 rectocele. After preoperative evaluation, vaginal NOTES salpingectomy, high uterosacral ligament fixation, and h-TOT were performed. The Foley catheter was removed at the 6<sup>th</sup> postoperative hour, R1 oral intake was initiated, and hemoglobin change was 1 g/dL. The patient, who had no complications, was discharged after 24 hours.

**Conclusion:** The oblique TOT technique first published by Emmanuel Delorme et al. in 2003 was changed to horizontal TOT (retropubic) by Delorme in 2018. The debate on the gold standard method among pelvic organ prolapse and incontinence surgical techniques continues. More scientific studies focusing on the Integral Theory and patient-centered approaches are needed.

**Keywords:** Rectovaginal fascia repair, retropubic TOT, uterosacral plication, vNOTES

**References**

1. Delorme E, Droupy S, de Tayrac R, Delmas V. Transobturator tape (Uratape). A new minimally invasive method in the treatment of urinary incontinence in women. *Prog Urol.* 2003; 13: 656-9.

2. Zakhari A, Nguyen DB, Smith JP, Mansour FW, Krishnamurthy S. vNOTES hysterectomy, adnexectomy, and uterosacral ligament suspension: A walk-through guide. *J Minim Invasive Gynecol.* 2022; 29: 1134-5.

**[OP-002]****How Should We Manage Complications in Urinary Incontinence Surgery?**

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**Aim:** Urinary incontinence is a condition known as urine leakage and is characterized by the involuntary passage of urine. It has several types, including stress, urge, mixed, overflow incontinence, or overactive bladder. Surgical, medical, and combined treatment methods are available and can be performed via vaginal, abdominal, laparoscopic, robotic, and vaginal natural orifice transluminal endoscopic surgery (vNOTES) techniques. Transvaginal tape (TVT) is a surgical procedure used to treat stress urinary incontinence in women. In this procedure, a tape is placed on the supporting tissues beneath the bladder. The tape provides support to the bladder, thereby reducing the risk of urine leakage during physical activities. As with any surgical procedure, there can be undesirable events such as infection, pain, complications related to the tape, or bleeding during the procedure. vNOTES is a minimally invasive surgical technique performed through the vaginal route and refers to endoscopic surgery conducted via the vaginal approach.

**Case:** A 39-year-old patient, G3P3, presented with stress incontinence and a desire for contraception. After a preoperative evaluation, vNOTES salpingectomy and TVT surgery were planned. First, salpingectomy was performed via posterior colpotomy, followed by TVT and cystoscopy, concluding the surgery. The Foley catheter was removed at the 6<sup>th</sup> postoperative hour, and voiding and post-void residual were assessed.

**Discussion:** On the 2<sup>nd</sup> postoperative day, the patient reported vaginal wetness. A Foley catheter was reinserted, and methylene blue was applied. Staining with methylene blue was observed from the anterior vaginal wall incision. Following a urology consultation, it was decided to leave the Foley catheter in place for 14 days, remove the mesh, and conduct another cystoscopic evaluation later. During the urological evaluation on the 15<sup>th</sup> postoperative day, mesh erosion was suspected, and the urine culture test result was awaited before cystoscopy.

**Conclusion:** Postoperative cystoscopic evaluation is crucial in patients who undergo TVT for urinary incontinence. Simultaneous methylene blue testing with cystoscopy is also recommended during the surgical experience. In urology and urogynecology clinics, there are differing opinions regarding mesh removal and cystoscopy timing in case of complications. This case presentation aims to emphasize the importance of a collaborative management approach and the need for patient-centered studies on evaluation protocols.

**Keywords:** TVT, complication, vNOTES

**References**

1. Zakhari A, Nguyen DB, Smith JP, Mansour FW, Krishnamurthy S. vNOTES Hysterectomy, adnexectomy, and uterosacral ligament suspension: A Walk-through guide. *J Minim Invasive Gynecol.* 2022; 29: 1134-5.

- Elers J, Bing MH, Birkefoss K, Rohde JF, Ussing A, Glavind K. TVT or TVT-O? - A systematic review and meta-analysis comparing efficacy, complications and re-operations. *Eur J Obstet Gynecol Reprod Biol.* 2021; 258: 146-51.
- Gökbel İ, Kinci MF, Akin Gökbel D, Sivaslioglu AA. Anatomical and symptomatic mid-term outcomes of patients with isolated anterior compartment defect repair or stress urinary incontinence: Anatomical and symptomatic outcomes of anterior compartment repair or SU. *BMC Womens Health.* 2023; 23: 443.

- Szymanowski P, Szeplieniec WK, Szveda H. Preperitoneal laparoscopic lateral repair in pelvic organ prolapse - a novel approach. *Ginekol Pol.* 2021; 92: 689-94.
- Arenholt LTS, Pedersen BG, Glavind K, Glavind-Kristensen M, DeLancey JOL. Paravaginal defect: anatomy, clinical findings, and imaging. *Int Urogynecol J.* 2017; 28: 661-73.
- Nguyen JK. Current concepts in the diagnosis and surgical repair of anterior vaginal prolapse due to paravaginal defects. *Obstet Gynecol Surv.* 2001; 56: 239-46.

## [OP-003]

### Laparoscopic Paravaginal Defect Repair

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**Aim:** Paravaginal defects, commonly observed in patients with anterior vaginal wall prolapse, occur due to the detachment of the pubocervical fascia from its lateral attachment to the arcus tendineus fascia pelvis.<sup>1</sup> Clinically, they often present as cystoceles without obliteration of vaginal rugae.<sup>2,3</sup> It is known that paravaginal defect repairs performed both abdominally and vaginally have quite good outcomes.<sup>4</sup> Initially repaired via open surgery, paravaginal defects have increasingly been treated laparoscopically with the advent of minimally invasive techniques. This shift provides several advantages, such as avoiding vaginal incisions, preserving vaginal length, reducing bleeding, enhancing visualization, shortening recovery time, and facilitating concurrent laparoscopic procedures.<sup>1</sup> In this presentation, we will share a case of laparoscopic paravaginal defect repair.

**Case:** A 48-year-old patient with a history of four vaginal deliveries presented with complaints of a palpable mass and dryness in the vaginal area. Vaginal examination revealed a cystocele graded as C:-2, Aa:+1, Ba:+2 according to pelvic organ prolapse quantification system with prominent vaginal rugae on the anterior vaginal wall. Examination confirmed a cystocele associated with a lateral defect. Abdominal trocars were inserted for laparoscopy. A peritoneal incision was made approximately 2 cm above the bladder dome, extending bilaterally towards the medial umbilical ligaments. The retroperitoneal and prevesical space was entered. Dissection exposed to obturator internus muscle and arcus tendineus fascia pelvis (ATFP). Bilateral paravaginal tissue detachment from the ATFP was identified.

**Discussion:** The fatty tissue overlying the pubocervical fascia was meticulously cleared while preserving the Santorini veins. The pubocervical fascia was exposed. Starting from the level of the sacrospinous ligaments, the bilateral ATFP was sutured step by step and fixed to the paravaginal area. 2/0 Ethibond sutures were used for the procedure, and the opened peritoneum was repaired with Vicryl sutures.

**Conclusion:** Accurate diagnosis and appropriate repair techniques for anterior vaginal wall prolapse and cystoceles associated with paravaginal defects are of critical importance. Failure to correctly identify the level of pelvic floor support loss may result in improper surgical choices, potentially exacerbating the defect and leading to surgical failures.

**Keywords:** Laparoscopy, prolapsus, ATFP

#### References

- Chinthakanan O, Miklos JR, Moore RD. Laparoscopic paravaginal defect repair: Surgical technique and a literature review. *Surg Technol Int.* 2015; 27: 173-83.

## [OP-004]

### A Case of Pelvic Peritoneal Tuberculosis Mimicking Peritoneal Carcinomatosis

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**Aim:** It is well known that among extrapulmonary tuberculosis cases, genital organ and pelvic-peritoneal tuberculosis cases make up a significant proportion in women.<sup>1,2</sup> Only about 10% of pelvic peritoneal tuberculosis cases, which present with highly non-specific symptoms, are diagnosed before laparotomy or laparoscopy.<sup>3</sup>

In particular, when findings such as abdominal pain, widespread ascites, a suspicious mass image formed by intestines that may be inflamed and adhered in a conglomerated manner, and elevated CA 125 are present, it becomes extremely difficult to differentiate the disease from ovarian cancer, peritoneal carcinomatosis, or pelvic abscess.<sup>4</sup> Accurate diagnosis is critical in preventing unnecessary and excessive surgery, as well as in directing the patient towards the correct treatment, especially in young patients who often suffer from concurrent infertility.

In this case, we will discuss the management of a pelvic peritoneal tuberculosis case diagnosed during diagnostic laparoscopy performed for suspected peritoneal carcinomatosis.

**Case:** A 39-year-old female patient presented to our clinic with complaints of abdominal bloating, pain, and accompanying infertility. On ultrasound, there was a widespread fluid appearance in the abdomen, and the patient's CA 125 value was 179 U/mL. Magnetic resonance imaging revealed multiple lymphadenopathies in the paraaortic and paracaval areas, a suspicious omental cake or omental metastasis, as well as widespread thickening and nodular formations in the peritoneum (suggestive of peritoneal carcinomatosis?). A positron emission tomography- computed tomography scan showed hypermetabolic uptake in the same areas, raising suspicion for peritoneal carcinomatosis.

**Discussion:** Laparoscopy was performed. Fluid was present in the Douglas pouch. Microscopic tumor-like deposits were noted in a miliary pattern on the bladder, uterus, fallopian tubes, peritoneal surfaces, and diaphragm. No mass was observed in the ovaries or uterus. An omental cake appearance was present in the omentum. Given that cytoreductive surgery would not be effective before neoadjuvant chemotherapy and considering the possibility of peritoneal tuberculosis in a patient with infertility, biopsies were taken from the omentum and peritoneal surfaces, and the surgery was concluded. The pathological result revealed a necrotizing granulomatous inflammatory process. The patient was referred to the infectious diseases department for treatment, and extrapulmonary tuberculosis therapy was initiated.

**Conclusion:** Pelvic peritoneal tuberculosis is a condition that can be confused with primary peritoneal cancers or peritoneal carcinomatosis, and can especially be associated with infertility. In patients with peritoneal tuberculosis, where medical treatment is planned instead of surgery, wide surgical procedures performed under the suspicion of malignancy may lead to irreversible organ loss. Therefore, it is crucial to keep this in mind during differential diagnosis.

**Keywords:** Tuberculosis, periton, laparoscopy

#### References

1. Dahiya B, Kamra E, Alam D, Chauhan M, Mehta PK. Insight into diagnosis of female genital tuberculosis. *Expert Rev Mol Diagn.* 2022; 22: 625-42.
2. Kehila M, Chanoufi MB. Tuberculose péritonéale: aspect laparoscopique de pelvis gelé [Peritoneal tuberculosis]. *Pan Afr Med J.* 2016; 25: 81. French.
3. Protopoulos A, Milingos S, Diakomanolis E, et al. Miliary tuberculous peritonitis mimicking advanced ovarian cancer. *Gynecol Obstet Invest.* 2003; 56: 89-92.
4. Sharma JB, Sharma SK, Dharmendra S, Singh UB, Kumar S, Roy KK. Laparoscopic evaluation of female genital tuberculosis in infertility: An observational study. *Indian J Med Res.* 2023; 157: 183-91.

## [OP-005]

### The Importance of Gynecological Examination in Genital Infections and Women's Health Protection

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**Aim:** Gynecological examination plays an important role in obstetrics and gynecology practice, with cervical cancer known as the fourth most common cancer among women worldwide. In Türkiye, the age-specific incidence rate is 4.3 per 100,000, and the mortality rate is 1.7 per 100,000. Human papillomavirus (HPV) plays a central role in the development of cervical neoplasia and is detected in 99.7% of cervical cancers. The most common histological types of cervical cancer are squamous cell carcinoma (70% of cervical cancers) and adenocarcinoma. This case report discusses the management of a patient who presented with complaints of postcoital vaginal bleeding and heavy vaginal discharge. The aim of our case report is to highlight the importance of timely routine screenings and emphasize the need for medical authorities to take a more active role in enhancing health literacy. According to American Society of Colposcopy and Cervical Pathology and American College of Obstetrics and Gynecology guidelines, routine screening is recommended for sexually active women starting at the age of 21. During routine examinations, sexually active women over 21 should have a Pap smear test every three years. A combined test is recommended for those over 30 years.

**Case:** A 39-year-old sexually active woman, with no additional health issues and no pregnancies, presented with complaints of postcoital vaginal bleeding and heavy vaginal discharge. Both she and her partner had positive venereal disease research laboratory test results and had received three doses of depot penicillin treatment. During the gynecological examination, abnormal findings were observed on the cervix, prompting sampling via Pap smear, colposcopic biopsy, and endocervical curettage. The endocervical curettage confirmed a

diagnosis of squamous cell carcinoma, and the smear result was reported as "high-grade squamous intraepithelial lesion". After magnetic resonance imaging and positron emission tomography imaging for further evaluation, the gynecologic oncology unit decided on surgery based on clinical staging (Figure 1, 2).

**Discussion:** Regular screening and early diagnosis are crucial for the successful management of the treatment process. Prof. Dr. M. Gültekin from our country leads the Prevention Committee of the European Society of Gynecological Oncology. Türkiye ranks among the leading countries in cervical cancer screening. However, efforts are ongoing to include HPV vaccines in the routine vaccination schedule. In conclusion, patients, physicians, healthcare facilities, medical authorities, and bureaucratic bodies have roles and responsibilities in the diagnosis and treatment of preventable diseases.

**Conclusion:** Ensuring the continuity of HPV screening and genotyping tests conducted on women aged 30-65 at Cancer Screening Centers within Family Health Centers, and integrating with gynecologists when necessary, is of great importance for the early diagnosis and treatment of diseases.

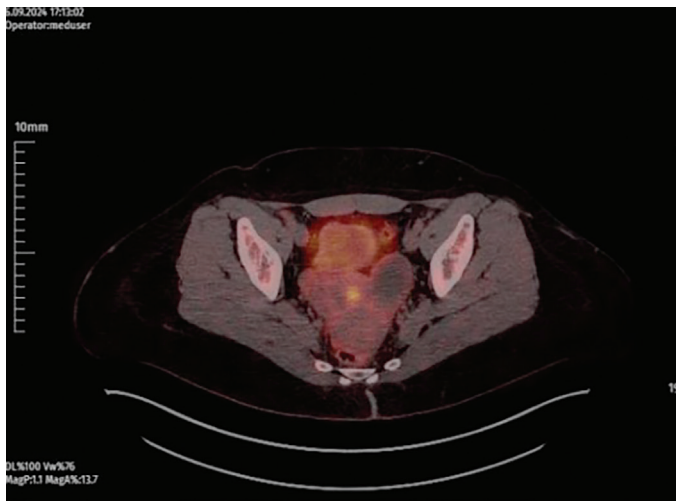
**Keywords:** Genital infections, cervical cancer, syphilis, screening and diagnosis

#### References

1. Oliver K, Frawley A, Garland E. HPV vaccination: Population approaches for improving rates. *Hum Vaccin Immunother.* 2016; 12: 1589-93.
2. Pimple SA, Mishra GA. Global strategies for cervical cancer prevention and screening. *Minerva Ginecol.* 2019; 71: 313-20.
3. Arbyn M, Simon M, de Sanjosé S, et al. Accuracy and effectiveness of HPV mRNA testing in cervical cancer screening: a systematic review and meta-analysis. *Lancet Oncol.* 2022; 23: 950-60.



**Figure 1.** Preoperative MRI view  
MRI: Magnetic resonance imaging



**Figure 2.** Preoperative PET-CT view

PET-CT: Positron emission tomography-computed tomography

## [OP-006]

### Transvaginal Surgical Approach for A Patient with Posterior Apical Compartment Defect and Obstructed Defecation Syndrome: A Case Report

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**Aim:** Pelvic organ prolapse (POP) is evaluated at three levels according to the DeLancey classification. We frequently encounter apical compartment defects. Posterior apical or isolated posterior compartment defects (formerly known as rectocele) have been reported in approximately 40% of women who have given birth vaginally. Obstructed defecation syndrome (ODS) is defined as the need to apply digital pressure to the vagina, perineum, or rectum to assist with defecation and is a common symptom seen in about 30% of women with uterovaginal prolapse. With this case presentation, we aim to share the surgical management of a patient presenting with ODS using a transvaginal approach.

**Case:** A 56-year-old postmenopausal woman, G2P2 (small-vessel disease), presented with a palpable mass in the vagina and complaints of chronic constipation. Apart from a history of hypertension, her medical history was unremarkable. Lifestyle and dietary recommendations were provided by different units due to her complaints over the past year, and no pathological condition was detected in the final colonoscopy. Gynecological and ultrasonographic examination revealed stage 1 uterine descent and stage 3 rectocele. Rectovaginal fascia fixation to the uterosacral ligament (RVF-USL) was planned for the posterior compartment defect. In the preoperative evaluation under general anesthesia, stage 2 uterine descent and stage 4 rectocele were observed. A vertical incision of approximately 2 cm was made at the midline of the upper third of the vagina using a no.11 scalpel. The rectum was deviated to the right. Using no. 2/0 Ethibond suture, the posterior cervical complex was first passed and then fixed to the right sacrospinous ligament. Subsequently, with a second suture, the USLs were plicated, and

the torn ends of the rectovaginal fascia were anchored at the level of the perineal body. First, the sacrospinous fixation suture was secured, followed by the RVF-USL fixation sutures. The vertical incision was closed, concluding the procedure. On the 7<sup>th</sup> postoperative day, compartment examinations were observed to be normal (Figure 1-3).

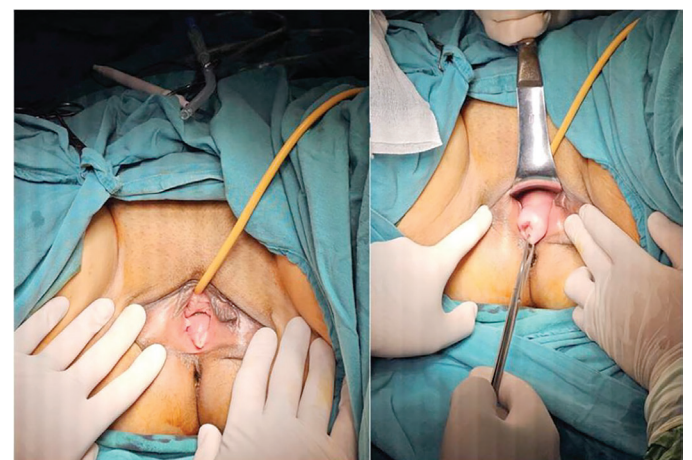
**Discussion:** Based on his research on anterior prolapse, Richardson argued that isolated tears in the rectovaginal septum lead to rectocele and advocated for specific repair targeting this region. Rectocele or internal rectal prolapse is considered an anatomical cause of ODS. As a first step, conservative treatment should be recommended for all patients. In patients with ODS, surgical techniques such as transanal, transvaginal, transperineal, or transabdominal approaches can be used according to the surgeon's preference. Standard POP surgical techniques (classic posterior colporrhaphy) are insufficient for resolving obstructed defecation (OD) symptoms. According to Karram and Maher, the transvaginal approach is superior to the transanal approach in repairing posterior compartment prolapse with level A evidence, and the use of mesh carries level B evidence. In a study by Milani et al., the use of polypropylene mesh in posterior repair showed a very high rate of postoperative dyspareunia (69%) and a *de novo* dyspareunia rate of 61%, which was significantly higher than the 20% *de novo* dyspareunia rate recorded when only fascial plication was used.

**Conclusion:** The increase in the geriatric population and the number of surgeons performing pelvic floor reconstruction highlights the need for randomized, prospective studies to achieve accurate anatomical and functional success within urogynecology on the basis of the Integral Theory.

**Keywords:** Obstructed defecation syndrome, rectovaginal fascia, sacrospinous ligament, uterosacral ligament plication

#### References

1. Mowat A, Maher D, Baessler K, Christmann-Schmid C, Haya N, Maher C. Surgery for women with posterior compartment prolapse. *Cochrane Database Syst Rev.* 2018; 3: CD012975.
2. Kilic D, Guler T, Gokbel I, Gokbel DA, Ceylan DA, Sivaslioglu A. Effects of isolated posterior vaginal wall prolapse on lower urinary tract symptoms. *J Gynecol Obstet Hum Reprod.* 2021; 50: 102095.



**Figure 1.** Preoperative appearance of rectocele and uterine descent

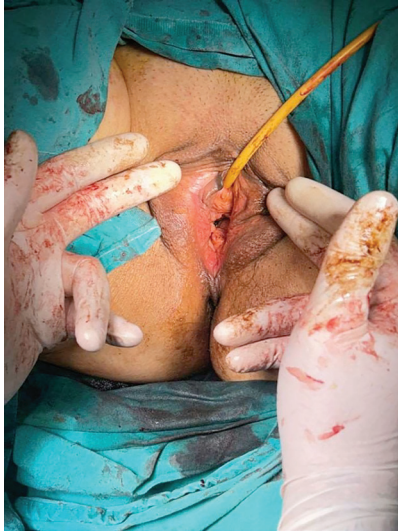


Figure 2. Postoperative appearance

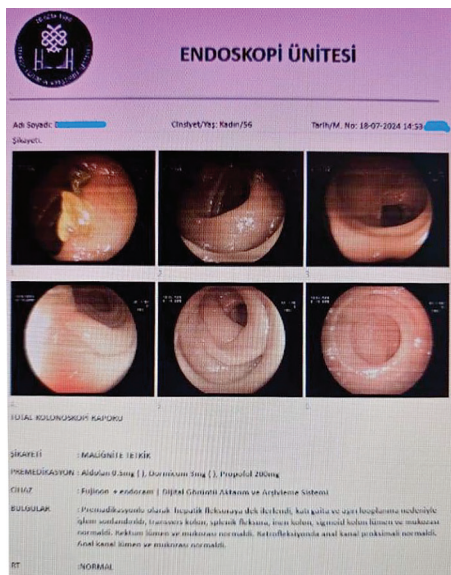


Figure 3. Preoperative colonoscopy result

## [OP-007]

### Cervical Pessary Application in Second Trimester: Case Series Report

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**Aim:** Studying of 5 cases of cervical vaginal pessary application during second trimester of pregnancy due to cervical shortening, funneling and uterine prolapse.

**Case:** The study consists of 5 cases who were referred to University of Health Sciences Türkiye, Etlik Zübeyde Hanım Obstetrics and Gynecology Training and Research Hospital due to pain and cervical shortening during their second trimester of pregnancy. The treatment methods were selected and applied by our clinic experienced specialists based on the patients gestational week and treatment decision. In our clinic, cerclage is not preferred for patients who are more than 24 week gestational age. Tocolysis, antenatal steroids and Arabian ring pessary via vaginal pathway were applied considering the patients gestational age.

**Discussion:** The vaginal pessary rings that generally used to treat genital prolapse also may be used to prevent preterm delivery. The cervical pessary applied is most commonly used to surround, compress, raise and rotate the cervix backwards.<sup>1</sup> The placement of a cervical pessary causes sacralization of the cervix and thus the change of the uterocervical angle.<sup>2</sup> In the study, the cases 2 and 4 were observed in the 36<sup>th</sup> week of pregnancy despite cervical funnelization, and reaching up to the 35<sup>th</sup> week is considered as a positive effect of cervical pessary. In the literature, it is thought that cervical pessary may be related to reduces cervical funnelization and even prolongs cervical length.<sup>2</sup> The incidence of uterine prolapse during pregnancy is a rare condition that can occur in 10,000 to 15,000 pregnancies. It is believed that the reason for this is due to poor apical support of the cardinal and uterosacral ligaments during pregnancy.<sup>3</sup> Multiparity, vaginal delivery, advanced age and high body mass index are the most common risk factors for uterine prolapse.<sup>4</sup> In our case series, in case 3, a stage 1 uterine prolapse was detected according to the pelvic organ prolapse quantification (POP-Q) system with cervical shortness due to having risk factors such as advanced maternal age, multiparity, and a history of vaginal birth.<sup>4</sup> According to the POPQ system, stage 1, the most distal part of the prolapse is defined as >1 cm above the hymen level.<sup>4</sup> The American College of Obstetricians and Gynecologists supports that cervical pessary, has no effect on preventing preterm delivery in patients who has single pregnancy with cervical shortening and no history of previous preterm delivery.<sup>5</sup> Perinatal results of case 5 in the case series support this view (Table 1).

**Conclusion:** The cases in the study were approached conservatively and pessary ring was used. We wanted to show that patient selection can be made according to the severity of the disease, although, in the literature there is no difference in the rate of preterm birth and neonatal results in pregnant women who were treated by cervical pessary for cervical shortness and who were not.<sup>5</sup>

**Keywords:** Pessary, pregnancy, prolapsus

#### References

1. Arabin B, Alfirevic Z. Cervical pessaries for prevention of spontaneous preterm birth: past, present and future. *Ultrasound Obstet Gynecol.* 2013; 42: 390-9.

2. Cannie MM, Dobrescu O, Gucciardo L, et al. Arabin cervical pessary in women at high risk of preterm birth: a magnetic resonance imaging observational follow-up study. *Ultrasound Obstet Gynecol.* 2013; 42: 426-33.
3. Yogev Y, Horowitz ER, Ben-Haroush A, Kaplan B. Uterine cervical elongation and prolapse during pregnancy: an old unsolved problem. *Clin Exp Obstet Gynecol.* 2003; 30: 183-5.
4. Tsikouras P, Dafopoulos A, Vrachnis N, et al. Uterine prolapse in pregnancy: risk factors, complications and management. *J Matern Fetal Neonatal Med.* 2014; 27: 297-302.
5. Hoffman, Matthew K. MD, MPH. Prediction and Prevention of Spontaneous Preterm Birth: ACOG practice bulletin, number 234. *Obstetrics & Gynecology* 138:p 945-6, December 2021.

**Table 1. Cases**

Case	History	Physiscal examination	Ultrasound examination	Applied treatment	Perinatal outcome
<b>Case 1</b>					
21 y G1P0A1L0 2w5d	6 weeks missed abortus	No cervical opening no effacement intact fetal membrane	No funneling cervicallength: 22 mm	Tocolysis antenatal steroids cervical pessary	37w NSD 3100 gr Apgar 1.,5. minute: 9,10
<b>Case 2</b>					
25y G1P0A0L0 25w	No specific history	1 cm cervical opening 30% effacement intact membranes	Funneling is present cervical length: 18 mm	Tocolysis antenatal steroids cervical pessary	36w2d threatened preterm labor Fetal distress: C/S
<b>Case 3</b>					
43y G6P2A3L2 28 w	2NSD, 10w/16w/17w abortion history No previous cerclage history no preterm delivery history	No cervical opening no effacement intact fetal membrane POPQ stage 1 uterine prolapse	No funneling cervical length: 24 mm	Tocolysis antenatal steroids cervical pessary	37wd1 threatened preterm labor fetal distress 3000 gr C/S Apgar 1.,5. minute :8,9
<b>Case 4</b>					
24y G2P1L1 26w	1 NSD No abortion history previous preterm delivery history	No cervical opening No effacement intact fetal membrane	Funneling is present cervical length: 21 mm	Tocolysis antenatal steroids cervical pessary	35w threatened preterm labor NSD: 2560 gr Apgar 1.,5. minute: 9,10
<b>Case 5</b>					
23y G1 24w3d	No specific history	2 cm cervical opening partial effacement intact membranes	Funneling is present cervical length: 15 mm	Tocolysis antenatal steroids cervical pessary	24wd6 PPROM NSD 680 gr Apgar 1.,5. minutes: 6,7 admission to neonatal ICU for 7 days: exitus

## [OP-008]

## A Case of Intrauterine Fetal Ovarian Cyst Rupture

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**Aim:** Fetal ovarian cysts occur in 1 in 2,500 births. They are the most common intraabdominal masses in the female fetus. They are often diagnosed in the third trimester and originates from a normal ovarian follicle. 1-Differential diagnosis should be made from gastrointestinal, urinary, renal masses. Increased incidence of fetal ovarian cysts has been reported in cases of maternal diabetes, Rh isoimmunization and preeclampsia. 2-Most of the cysts regress spontaneously during follow-up during pregnancy. The patient should be carefully monitored for complications such as ovarian torsion, cyst rupture, bleeding into the cyst, ascites, fetal anemia and compression of neighboring organs. 3-In this case report, we aimed to present cyst rupture, which is a rare complication of fetal ovarian cysts and antenatal follow-up.

**Case:** Twenty-six year-old, G5P2A2(C/Sx2),30 weeks pregnant, fetal intraabdominal abdominal cyst was detected on routine examination of the patient. Did not have screening tests, hyperechogenic bowel detected on anomaly scan. She has no comorbidities. Ultrasound measurements were compatible with her week, amniotic fluid was within normal limits and Doppler blood flow was normal. When the fetal abdomen was evaluated, a 28x23 mm lesion in the left adnexal area, which was thought to be an ovarian cyst in the foreground, was observed (Figure 1). At the 34<sup>th</sup> gestational week, a 10 mm daughter cyst was found in the intraabdominal left cyst with a size of 56x49x48 mm in a heterogeneous structure with no blood flow in Doppler (Figure 2). There was a 96x27 mm free fluid in the abdomen (Figure 3). MCA PSV 1 MoM was within normal limits and anemia was not considered. She was diagnosed as intrauterine rupture of fetal ovarian cyst and admitted to our service for follow-up because of the possible risk of fetal anemia. Follow-up ultrasound showed a decrease in intraabdominal fluid and regression in cyst size. MCA Doppler was normal. On the 4<sup>th</sup> day of hospitalization, the cyst size decreased to 41x43 mm, and no intra-abdominal free fluid was observed. Patient was discharged and outpatient follow-up was initiated. At 36<sup>th</sup> week follow-up, complete resolution of the ovarian cyst was observed. No additional pathology was observed in the follow-up and the patient was taken to caesarean section in our clinic at 39<sup>th</sup> week, 3465 grams, 8-10 APGAR, baby girl delivered. No pathology was found in postnatal follow-up.

**Discussion:** Ovarian cyst should be kept in mind in the differential diagnosis of intraabdominal masses detected antenatally. Although the finding of daughter cyst on ultrasonographic diagnosis is rare, it is a specific finding for ovarian cyst. There is no consensus on the follow-up and treatment of cysts. Although ovarian cyst aspiration is recommended for cysts larger than 6 cm in size, it may complicate the existing cyst and may cause complications such as preterm labor and fetal injury. In our patient with cyst rupture and intraabdominal hemorrhage, there was no deterioration in Doppler and biophysical profile and spontaneous resolution was observed. The mode of delivery should be determined by obstetric indications.

**Conclusion:** We suggest that most cysts will spontaneously regress in size and that careful examination for possible complications should be performed during follow-up.

**Keywords:** Fetal ovarian cyst, fetal intraabdominal hemorrhage, fetal cyst rupture

## References

1. Bryant AE, Laufer MR. Fetal ovarian cysts: incidence, diagnosis and management. J Reprod Med. 2004; 49: 329-37.
2. Heling KS, Chaoui R, Kirchmair F, Stadie S, Bollmann R. Fetal ovarian cysts: prenatal diagnosis, management and postnatal outcome. Ultrasound Obstet Gynecol. 2002; 20: 47-50.
3. Akın MA, Akın L, Özbek S, et al. Fetal-neonatal ovarian cysts--their monitoring and management: retrospective evaluation of 20 cases and review of the literature. J Clin Res Pediatr Endocrinol. 2010; 2: 28-33.



Figure 1. 28x23 mm lesion in the left adnexal area



Figure 2. Intraabdominal left 56x49x48 mm heterogeneous cyst of 10 mm in size daughter cyst finding

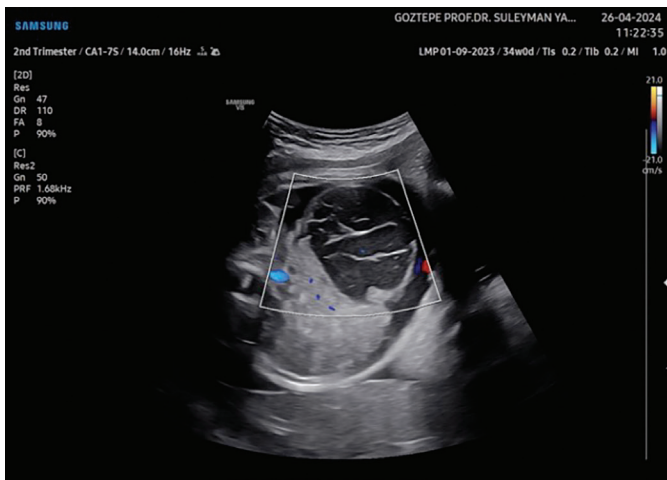


Figure 3. Free abdominal fluid 96x27 mm in size

## [OP-009]

### A Rare Case of Mesonephric-like Adenocarcinoma of the Ovary

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**Aim:** This report presents a rare case of mesonephric-like adenocarcinoma (MLA) of the ovary in a 48-year-old female with a history of chronic pelvic pain and suspected right ovarian endometrioma. The case highlights the diagnostic and therapeutic challenges associated with this uncommon malignancy. Surgical and pathological findings confirmed the diagnosis of MLA, emphasizing the importance of recognizing this rare entity for appropriate management. MLA of the ovary is a rare subtype of ovarian cancer. Its inclusion in the 2020 WHO classification of endometrial and ovarian neoplasms raises awareness among clinicians and pathologists.<sup>1</sup> MLA origin is unknown; theories include that it arises from mesonephric remnants near the ovary or from Mullerian epithelium that differentiates along the mesonephric pathway. Its morphological features include cuboidal tumor cells forming tubular, glandular, papillary and cordlike structures containing often eosinophilic material.<sup>2</sup> MLA shares similar morphological, molecular and immunophenotypic features with mesonephric adenocarcinoma. Mesonephric remnants are not found in the ovary or endometrium, meaning that is, unlike its mesonephric counterpart, MLA does not demonstrate direct evidence of mesonephric remnants in ovarian tissues.<sup>1,3</sup> It may coexist with ovarian Mullerian anomalies, endometriosis and adenofibromas.<sup>4</sup> MLA is predominantly seen in postmenopausal patients, median age 61 years. It is a rare entity and endometrial MLA constitutes less than 1% of all endometrial carcinomas. Epidemiologic data for ovarian MLA are limited and further studies are needed to characterize its prevalence and clinical features.<sup>5-7</sup> Ovarian MLA presents with typical symptoms of other ovarian malignancies such as pelvic pain, abdominal distension and sometimes association with endometriosis. Diagnosis is based on postoperative pathology and treatment involves surgery followed by adjuvant chemotherapy.<sup>8,9</sup>

**Case:** A 48-year-old married, multiparous female with history of endometrioma, with medical history of varicose veins and asthma presented

with persistent pelvic pain, dysmenorrhea and dyspareunia lasting 3 years which became persistent throughout the previous 3 weeks with serious abdominal distension. Her surgical history consisted of varicose vein repair & cesarean section and she had a father & mother history of stroke. She had no personal malignancy history. Her recent gynecological examination with transvaginal ultrasonography showed an enlarged ovarian cyst with solid component 45x34 mm. Pelvic magnetic resonance imaging revealed a 50x48 mm cystic lesion in the right ovary with hyperintense T2-weighted signals and solid component suspicious of malignancy. Tumor markers were elevated (CA125: 123 U/mL, CA19.9: 41.7 U/mL). The patient has undergone a laparotomy with intraoperative frozen section consultation, which confirmed the presence of carcinoma within the right ovarian mass. Surgical procedures included total abdominal hysterectomy, bilateral salpingo-oophorectomy, total omentectomy, pelvic and paraaortic lymph node dissection and peritoneal fluid aspiration. The surgery was completed successfully without any complications, and the patient was discharged in stable condition on the second postoperative day. Definitive histopathological findings include right ovarian tumor was a 7.5x6x3.5 cm cystic tumor with solid components macroscopically with an exophytic area with 0.6 cm diameter observed on the cyst. Immunohistochemically, the tumor cells were positive for PAX8, GATA3 (focal), TTF1 (diffuse), CD10 (luminal), p53 (wild-type pattern) and p40 but negative for estrogen receptor, progesterone receptor, WT1, CDX2, androgen receptor, and NKX3-1. For MMR proteins, no loss of nuclear expression was found and showed low likelihood of MSI-H. No mesonephric remnants were observed in the cervix. No pathological findings were noted in the omentum. Peritoneal fluid cytology revealed few mesothelial cells. Lymphovascular invasion is not present. Nine biopsied pelvic and paraaortic lymph node tested negative for metastasis. The final diagnosis was confirmed as MLA of the right ovary, stage IC2 (International Federation of Gynecology and Obstetrics, FIGO, 2014).

**Discussion:** MLA is a rare ovarian neoplasm with difficult diagnosis due to its overlap with other Mullerian origin tumours. Its origin is controversial, with theories ranging from differentiation along the mesonephric pathway from Mullerian epithelium. MLA presents with overlapping features with other ovarian malignancies and presents diagnostic challenges. Histopathologic and molecular results & immunohistochemical markers are crucial to distinguish MLA from low grade endometrioid adenocarcinoma, serous carcinoma, clear cell carcinoma and carcinosarcoma of the ovaries.<sup>1,8</sup> Regarding the Mullerian origin of MLA, an immunohistochemical marker as PAX8(+) are typically present.<sup>10</sup> Mesonephric origin is suggested by the positivity of GATA3, TTF1, and luminal CD10.<sup>11,12</sup> Low-grade endometrioid adenocarcinoma can be differentiated from MLA by its lack of architectural heterogeneity, with positivity for ER and PR and TTF1 negativity.<sup>13</sup> Clear cell carcinoma, characterized by cytological atypia and architectural variability, Abnormal p53 and MMR can be seen in clear cell carcinoma, in contrast to MLA.<sup>14</sup> Serous carcinoma demonstrates high-grade nuclear atypia and papillary architecture, alongside abnormal p53 and block-like p16 expression. Lastly, carcinosarcoma features solid areas with sarcomatoid differentiation and is negative for KRAS mutations, further distinguishing it from MLA.<sup>15</sup> Microscopic criteria for diagnosing endometriosis-associated ovarian cancer include the presence of endometriosis adjacent the tumor, exclusion of invasion from other sources, endometrial stroma-like tissue around epithelial glands and histological evidence of malignant transformation. Genetic mutations commonly observed in endometriosis-related malignancies include PTEN, KRAS, PIK3CA, ARID1A, and CTNNB1. Although MLA is an extremely rare subtype of ovarian cancer, its occurrence in the context of endometrioma is even more uncommon. In MLA, frequent mutations include KRAS, NRAS, BRAF, PTEN, and CTNNB1, highlighting the need for further research into molecular pathways and potential therapeutic targets.<sup>16,17</sup> The details of the reported cases of MLA arising in association with endometriosis are summarized in Table 1. This case highlights the need for surgical management followed by adjuvant chemotherapy even in early stage MLA due to the risk of recurrence. The 5-year progression free survival rate (60%) and 71% overall survival are



reported in the literature, but results may differ according to stage at diagnosis and treatment strategy.<sup>18</sup>

**Conclusion:** Rare ovarian malignancies such as MLA should be recognized for prompt diagnosis and treatment. Further studies on molecular pathways and therapeutic targets could yield better outcomes in this subset of patients.

**Keywords:** Adenocarcinoma, adnexial mass, ovary

**References**

- McCluggage WG. Mesonephric-like Adenocarcinoma of the female genital tract: from morphologic observations to a well-characterized carcinoma with aggressive clinical behavior. *Adv Anat Pathol.* 2022; 29: 208-16.
- Yang Y, Zhao M, Jia Q, et al. Mesonephric-like adenocarcinoma of the ovary. *J Ovarian Res.* 2024; 17: 57.
- Mirkovic J, McFarland M, Garcia E, et al. Targeted genomic profiling reveals recurrent KRAS mutations in mesonephric-like adenocarcinomas of the female genital tract. *Am J Surg Pathol.* 2018; 42: 227-33.
- Euscher ED, Marques-Piubelli ML, Ramalingam P, et al. Extrauterine mesonephric-like carcinoma: A comprehensive single institution study of 33 cases. *Am J Surg Pathol.* 2023; 47: 635-48.
- Kolin DL, Costigan DC, Dong F, Nucci MR, Howitt BE. A combined morphologic and molecular approach to retrospectively identify KRAS-mutated mesonephric-like adenocarcinomas of the endometrium. *Am J Surg Pathol.* 2019; 43: 389-98.
- Ogawa A, Yoshida H, Kawano S, et al. Ovarian mesonephric-like adenocarcinoma: its prevalence in a Japanese high-volume cancer center and a literature review on therapeutic targets. *Curr Oncol.* 2024; 31: 5107-20.
- da Silva EM, Fix DJ, Sebastiao APM, et al. Mesonephric and mesonephric-like carcinomas of the female genital tract: molecular characterization including cases with mixed histology and matched metastases. *Mod Pathol.* 2021; 34: 1570-87.
- Mirkovic J, McFarland M, Garcia E, et al. Targeted genomic profiling reveals recurrent KRAS mutations in mesonephric-like adenocarcinomas of the female genital tract. *Am J Surg Pathol.* 2018; 42: 227-33.
- Deolet E, Van Dorpe J, Van de Vijver K. Mesonephric-like adenocarcinoma of the endometrium: diagnostic advances to spot this wolf in sheep's clothing. A review of the literature. *J Clin Med.* 2021; 10: 698.
- Tong G, Devaraj K, Hamele-Bena D, et al. Pax8: A marker for carcinoma of Müllerian origin in serous effusions. *Diagn Cytopathol.* 2011; 39: 562-6.
- McCluggage WG, Oliva E, Herrington CS, McBride H, Young RH. CD10 and calretinin staining of endocervical glandular lesions, endocervical stroma and endometrioid adenocarcinomas of the uterine corpus: CD10 positivity is characteristic of, but not specific for, mesonephric lesions and is not specific for endometrial stroma. *Histopathology.* 2003; 43: 144-50.
- Pors J, Cheng A, Leo JM, Kinloch MA, Gilks B, Hoang L. A comparison of GATA3, TTF1, CD10, and calretinin in identifying mesonephric and mesonephric-like carcinomas of the gynecologic tract. *Am J Surg Pathol.* 2018; 42:1596-606.
- Stolnicu S, Barsan I, Hoang L, et al. Diagnostic Algorithmic proposal based on comprehensive immunohistochemical evaluation of 297 invasive endocervical adenocarcinomas. *Am J Surg Pathol.* 2018; 42: 989-1000.
- Travaglino A, Raffone A, Santoro A, et al. Clear cell endometrial carcinomas with mismatch repair deficiency have a favorable prognosis: A systematic review and meta-analysis. *Gynecol Oncol.* 2021; 162: 804-8.
- Park S, Park E, Kim HS. Mesonephric-like carcinosarcoma of the uterine corpus: clinicopathological, molecular and prognostic characteristics in comparison with uterine mesonephric-like adenocarcinoma and conventional endometrial carcinosarcoma. *Cancer Genomics Proteomics.* 2022; 19: 747-60.
- Ma T, Chai M, Shou H, Ru G, Zhao M. Mesonephric-like adenocarcinoma of uterine corpus: a clinicopathological and targeted genomic profiling study in a single institution. *Front Oncol.* 2022; 12: 911695.
- Hablase R, Kyrou I, Randeve H, Karteris E, Chatterjee J. The “road” to malignant transformation from endometriosis to endometriosis-associated ovarian cancers (EAOCs): An mTOR-centred review. *Cancers (Basel).* 2024; 16: 2160.
- Pors J, Segura S, Chiu DS, et al. Clinicopathologic characteristics of mesonephric adenocarcinomas and mesonephric-like adenocarcinomas in the gynecologic tract: A multi-institutional study. *Am J Surg Pathol.* 2021; 45: 498-506.

**Table 1. Reported cases of MLA arising in association with endometriosis**

Case	Age	Associated findings	Immunohistochemical results	Chemotherapy
McCluggage et al., 2020	61	Serous borderline tumor and endometriosis	PAXB, CD10, GATA3, TTF-1 (positive); ER, PR, WT (negative)	Carboplatin+paclitaxel
McFarland et al., 2016 (5 cases)	42-72	Endometriosis (3 cases IA, 1 case IB, 1 case IIC)	CKT, PAX8 (positive); ER, PR (negative)	Not specified
Dundr et al., 2020	61	Serous borderline tumor and endometriosis	PAX8, CD10, GATA3 (positive) TTF1(focal positive); ER, PR, WT1 (negative)	Carboplatin+paclitaxel (6)
Nilforoushan et al, 2023 (2 cases)	58, 70	Serous borderline tumor and endometriosis	GATA3 (positive); WT1, ER, PR (negative); p16 (focal positive)	Not specified
McCluggage et al, 2018 (3 cases)	50-77	Borderline endometrioid adenoma and endometriosis	CK7, PAX8 (positive); ER, PR (negative)	Not specified
Seay et al., 2020	67	Endometriosis	CK7, PAX8 (positive); HNF1B, TTF-1, CD10, p16 (focal positive); ER, PR, WT1 (negative)	Carboplatin+paclitaxel
Zhang Fangyuan et al., 2022	61	Serous-mucinous borderline neoplasm with endometriosis	ER, PR, WT1, Desmin (negative); PMS2, SALL4, MLH1, MSH6 (positive)	Carboplatin+paclitaxel (5)
Zhang Shikai et al., 2022	67	Borderline seromucinous neoplasm, endometriosis	GATA3, TTF-1, PAX8, CD10 (positive); ER, PR (negative)	Not specified
Yang et al., 2024	45	Endometriosis-associated MLA and teratoma	GATA-3, TTF-1, CD10 (focal +), ER (partial +), PR (focal +); p53 (wild type), Ki67 30%	Carboplatin+paclitaxel
Chang et al., 2022	51,57	Endometriosis	CD10 (positive), GATA3 (positive), PAX8, TTF-1 (positive), ER (negative)	Not specified
Sugitani et al, 2024	63	Endometriosis	PAX8, CD10 (positive), GATA3 (focal), TTF-1 (focal positive); ER, PR, WT1 (negative)	Not specified

## [OP-010]

## A Case of Parasitic Leiomyoma in A Postmenopausal Woman Eight Years After Hysterectomy

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**Aim:** Uterine fibroids or leiomyomas develops with the proliferation of smooth muscles and connective tissues of the uterus.<sup>1</sup> Parasitic fibroids, known as the extrauterine variant of myoma is defined as type 8 fibroid by the International Federation of Gynecology and Obstetrics.<sup>2</sup> Parasitic fibroids is independent of the uterus, and they can be primary, secondary, or iatrogenic. Researchers speculated that parasitic fibroids may develop from tissue fragments formed in previous surgery such as myomectomy. Also, researchers suggested that parasitic fibroids may occur due to the metaplastic changes in extrauterine smooth muscle tissues.<sup>3-5</sup> Uterine fibroids usually doesn't grow after menopause due to the absence of estrogen and progesterone. Therefore, parasitic fibroids are very rare in postmenopausal women. This case report presents the parasitic fibroid occurring eight years after total abdominal hysterectomy in a postmenopausal woman.

**Case:** A 62-year-old postmenopausal woman was evaluated at the gynecology clinic for lower abdominal pain and vaginal spotting for two months. She was para three, live three, and all her deliveries were vaginal. She had no comorbidity and had a history of total abdominal hysterectomy and bilateral salpingectomy eight years back for treatment-resistant menorrhagia and endometrial hyperplasia without atypia. There was no family history of malignancy. Her vitals were stable. On palpation, a fixed nodular mass was felt filling the suprapubic area. There are any painful areas in the abdomen. On her speculum examination, the vagina was healthy. Bimanual examination revealed a mass filling vaginal vault. The laboratory tests were within normal limits. The serum cancer antigen-125 was 10.5 IU/mL. The electrocardiogram and chest X-ray were normal. Transvaginal ultrasonography showed a mass containing solid and cystic components measuring 6×7 cm and no ascites (Figure 1). Magnetic resonance imaging of pelvis revealed a large mass containing hypointense and hyperintense solid area measuring 7×6×6 cm possibly parasitic leiomyoma (Figure 2). Patient was posted for diagnostic laparoscopy. Intra-operative findings revealed a pelvic mass in the midline of the vaginal cuff, measuring 6x7 cm, covered with peritoneum, adhering to the vaginal stump with both ovaries appearing normal. Laparotomy was performed. The mass was removed by opening the adhesions (Figure 3) and both ureteral traces were observed. Histopathological report was consistent with leiomyoma (Figure 4). Post-operative course was uneventful and patient was discharged on the fourth day.

**Discussion:** Parasitic fibroid is defined as a myoma originating from the uterus but receiving its nutrition from another source.<sup>1</sup> In the literature, parasitic fibroid was described for the first time by Kelly and Cullens<sup>6</sup> in 1909. Researchers speculated that the implantation of pieces scattered during myomectomy into other tissues may be a cause of parasitic fibroid. Lu et al.<sup>7</sup> reported all six patients diagnosed with parasitic leiomyoma had a history of laparoscopic myomectomy or hysterectomy using power morcellation previously. Also, Pallavae et al.<sup>8</sup> reported a case of broad ligament fibroid in a woman undergone total abdominal hysterectomy six years back for multiple

fibroids in the uterus. However, a small number of cases of primary parasitic leiomyoma have been reported in the literature. Osegi et al.<sup>9</sup> reported a rare case of spontaneous parasitic leiomyoma weighed 5.2 kg occurring in a menopausal woman without history of previous operation. In our case, the patient had a history of total abdominal hysterectomy due to the treatment-resistant menorrhagia. She had no history of myomectomy, and no myoma was reported in the pathological examination of the hysterectomy specimen. Considering that fibroids need ovarian hormones to grow, parasitic fibroids are not expected to appear in the postmenopausal period. So, this current case is the first in the literature to present a case of parasitic myoma in a postmenopausal patient who had previously undergone hysterectomy due to treatment-resistant menorrhagia. Parasitic fibroid may cause different symptoms depending on its location, size and relationship with the adjacent organ. Patients may present with abdominal pain, uterine bleeding, and swelling in the abdomen.<sup>1,5</sup> Our patient presented with lower abdominal pain and vaginal spotting. Medical history and imaging methods may help clinicians in diagnosing parasitic fibroid. In the current case, an isolated parasitic fibroid attached to vaginal stump was detected. Management of this parasitic fibroid was initially planned to be removed laparoscopically. Afterwards, open surgery was performed due to adhesions.

**Conclusion:** Parasitic fibroid may present with different clinical presentations. Rarely, as in the current case, it may occur in a patient who has undergone hysterectomy due to menorrhagia resistant to treatment, without any history of uterine myoma. This report also demonstrated a parasitic myoma that occurs after menopause, which is uncommon. Clinicians should be careful in diagnosis because parasitic myomas can mimic other pelvic tumors. Parasitic myoma should be considered in cases of unusual abdominopelvic masses even in the post-hysterectomy state and postmenopausal period.

**Keywords:** Parasitic fibroma, hysterectomy, postmenopause

### References

1. Stewart EA. Uterine fibroids. *Lancet*. 2001; 357: 293-8.
2. Munro MG, Critchley HO, Broder MS, Fraser IS. FIGO classification system (PALM-COEN) for causes of abnormal uterine bleeding in nongravid women of reproductive age. *Int J Gynaecol Obstet*. 2011; 113: 3-13.
3. Erenel H, Temizkan O, Mathyk BA, Karataş S. Parasitic myoma after laparoscopic surgery: a mini-review. *J Turk Ger Gynecol Assoc*. 2015; 16: 181-6.
4. Vaquero ME, Magrina JF, Leslie KO: Uterine smooth-muscle tumors with unusual growth patterns. *J Minim Invasive Gynecol*. 2009; 16: 263-8.
5. Kho KA, Nezhad C. Parasitic myomas. *Obstet Gynecol*. 2009; 114: 611-5.
6. Kelly HA, Cullen TS. *Myomata of uterus*. Philadelphia: W B Saunders; 1909.
7. Lu B, Xu J, Pan Z. Iatrogenic parasitic leiomyoma and leiomyomatosis peritonealis disseminata following uterine morcellation. *J Obstet Gynaecol Res*. 2016; 42: 990-9.
8. P P, Ghose S, Samal S, Begum J, Zabeen M. Fibroid after hysterectomy: a diagnostic dilemma. *J Clin Diagn Res*. 2014; 8: OD01-2.
9. Osegi N, Oku EY, Uwaezuoke CS, Alawode KT, Afolabi SA. Huge primary parasitic leiomyoma in a postmenopausal lady: a rare presentation. *Case Rep Obstet Gynecol*. 2019; 2019: 7683873.



Figure 1. Transvaginal sonogram showing solid and cystic pelvic mass of size 6×7 cm

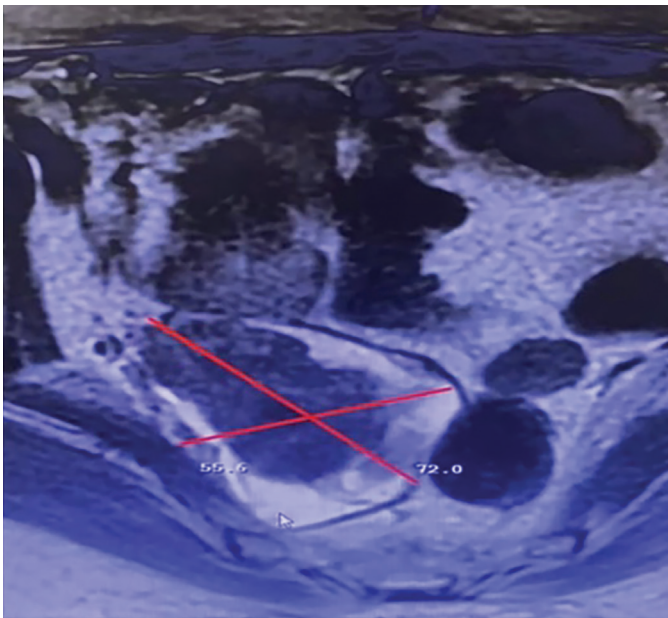


Figure 2. MRI of the pelvis (sagittal image) showing the relationship between the parasitic fibroid and urinary bladder

MRI: Magnetic resonance imaging

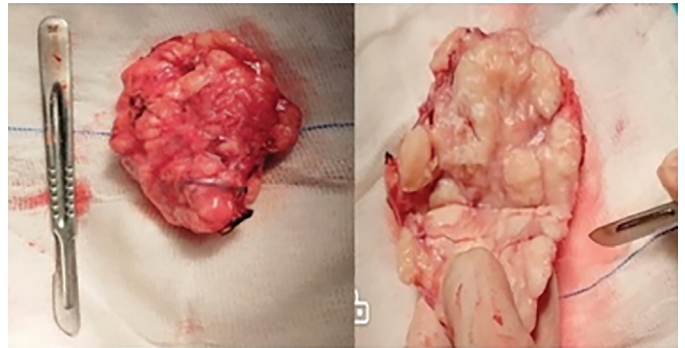


Figure 3. Operated specimen of fibroid

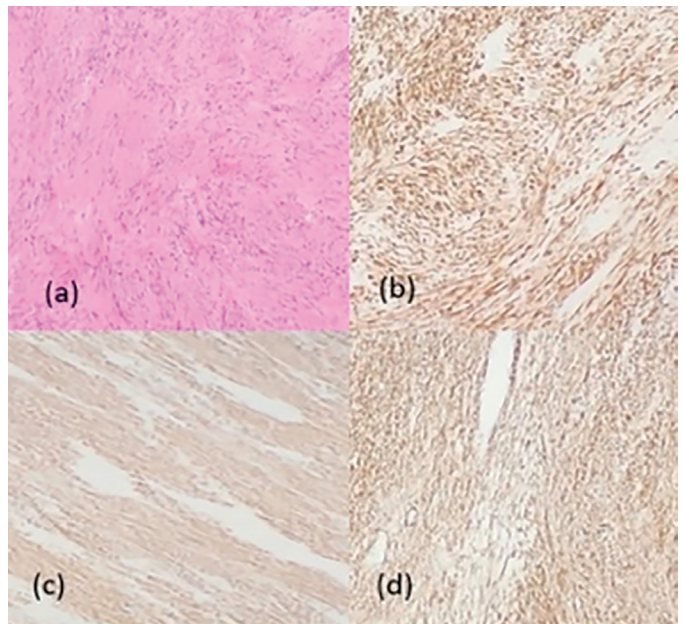


Figure 4. Immunohistochemical staining of fibroid cells were positive for hematoxylin-eosin (a), desmin (b), SMA (c), and caldesmon (d)

[OP-011]

**Endometrioma and Systemic Inflammation: Relationships Between Systemic Inflammation Index (SII), Systemic Inflammation Response Index (SIRI), and Pan-immune Inflammation Value (PIV)**

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**Aim:** Ovarian endometriomas are cystic structures formed by the transformation of epithelial cells into endometrial tissue (coelomic metaplasia) or the inward progression of ectopic endometrial tissue on the ovarian surface (progressive invagination). They are defined as benign masses in the pelvic region. Endometriosis, on the other hand, is a progressive disease involving the spread of endometrial tissue outside the uterine cavity to pelvic organs and the peritoneum, and is commonly associated with pelvic pain and infertility<sup>1</sup>. Studies investigating the mechanisms of inflammation in patients with endometriosis have often focused on inflammatory cells. It has been found that neutrophil activation responds to specific alarm signals only in patients with advanced-stage endometriosis<sup>2</sup>. The aim of our study is to evaluate whether isolated endometrioma triggers systemic inflammation mechanisms using novel inflammatory markers such as systemic inflammation index (SII), systemic inflammation response index (SIRI), and pan-immune inflammation value (PIV). It is considered that the relationship between endometrioma and systemic inflammation is not yet fully understood, and there are limited studies in the literature regarding these parameters.

**Case:** This study included patients diagnosed with endometrioma between November 1, 2022, and August 1, 2024, at the Obstetrics and Gynecology Clinic of Ankara Etlik City Hospital. Parameters such as the systemic inflammation index (SII), Systemic inflammation response index (SIRI), and pan-immune

inflammation value (PIV) were examined. The control group consisted of individuals without any gynecological or systemic disease. Data were retrospectively collected from patient records and analyzed statistically using the Student's t-test.

**Discussion:** The mean age of the endometrioma group was 36.5±8.47, while the mean age of the control group was 34.1±11.4, with no statistically significant difference between the two groups ( $p=0.77$ ). The CA125 values were 280±74.5 in the endometrioma group and 26.0±22.5 in the control group, showing a statistically significant difference ( $p=0.003$ ). The CA19-9 values were 80.2±26.0 in the endometrioma group and 15.3±16.2 in the control group, also indicating a statistically significant difference ( $p=0.020$ ). There were no significant differences between the two groups regarding platelet, neutrophil, monocyte, and lymphocyte counts. The SII, SIRI, and PIV values were 970±146.6, 1.73±1.21, and 551±420 in the endometrioma group, and 753±471, 1.39±1.02, and 419±313 in the control group, respectively, with no statistically significant differences observed (SII:  $p=0.121$ , SIRI:  $p=0.107$ , PIV:  $p=0.100$ ).

**Conclusion:** In our study, no significant differences were found in systemic inflammation parameters in the endometrioma group. This result suggests that endometriomas do not induce systemic inflammation and that the inflammatory effects may be localized. However, there are limited studies in the literature on the relationship between endometrioma and systemic inflammation. Additionally, the retrospective nature of the study and the limited sample size may restrict the generalizability of the findings.

**Keywords:** Endometrioma, systemic inflammation index, systemic inflammation response index, pan-immune inflammation value

**References**

- Jiang L, Yan Y, Liu Z, Wang Y. Inflammation and endometriosis. *Front Biosci (Landmark Ed)*. 2016; 21: 941-8.
- Yland J, Carvalho LFP, Beste M, et al. Endometrioma, the follicular fluid inflammatory network and its association with oocyte and embryo characteristics. *Reprod Biomed Online*. 2020; 40: 399-408.

**Table 1. Comparison of endometrioma (group 1) and other control group (group 2)**

	Group	Age	CA 125	CA 19-9	PLT	NEU	MON	LYM	SII	SIRI	PIV
Number of patient	1	213	213	213	213	213	213	213	213	213	213
	2	207	207	207	207	207	207	207	207	207	207
Mean	1	36.5	280	80.2	311000	5.81	0.568	2.18	970	1.73	551
	2	34.1	26.0	15.3	302000	5.08	0.542	2.23	753	1.39	419
Standard deviation	1	8.47	74.5	26.0	83300	5.24	0.188	0.751	146.6	1.21	420
	2	11.4	22.5	16.2	58500	2.32	0.164	0.690	471	1.02	313
p-value		0.77	0.003	0.020	0.22	0.145	0.180	0.646	0.121	0.107	0.100

## [OP-012]

## A Case of Uterine Clear Cell Carcinoma in A Postmenopausal Woman Diagnosed by Repeated Pipelle Endometrial Biopsies

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**Aim:** Endometrial biopsy is used for evaluation of endometrium in cases of postmenopausal bleeding. Women with postmenopausal bleeding have low sampling accuracy since blind biopsy cannot sample all endometrial lesions, especially focal lesions. In this case, a postmenopausal woman diagnosed with uterine clear cell carcinoma through repeated pipelle endometrial biopsies was presented.

**Case:** A 68-year old multiparous woman [166 cm, 67 kg, body mass index (BMI) 24.3 kg/m<sup>2</sup>], admitted to gynecology outpatient clinic with complaints of repeated spotting for last 2 months. She had past history of four child with vaginal delivery. She had menopause 20 years back and had no comorbidities. Speculum examination showed a healthy looking cervix and vagina. Bimanual examination revealed no mass. Transvaginal sonogram revealed a fluid accumulation in the cavity without endometrial thickening (Figure 1a.) and atrophic ovaries. Routine hemological and biochemical tests and tumor marker values were within normal limit. Cervical smear and Pipelle endometrial sampling were done and sent for histopathological examination. Histopathology revealed inflammatory and atrophic findings and superficial endometrial structures without atypia. The patient was discharged to come for a check-up. He was readmitted after 3 months due to recurrence of spotting complaints. Pipelle endometrial sampling was performed again and the pathology reported insufficient sample for diagnosis but as suspected malignancy. In order to obtain adequate endometrial sampling, a biopsy was planned with a sharp curette under mask anesthesia. However, due to cervical stenosis, the cavity could not be entered with a sharp curette, and endometrial sampling with Pipelle was performed again. Large samples were sent for histopathological examination. Microscopic examination of sections revealed tumor cells with frequent mitosis, abundant clear cytoplasm,

hobnailing appearance and hyperchromatic, pleomorphic and prominent nucleoli (Figure 1b). Histomorphology was diagnosed as clear cell carcinoma of the endometrium.

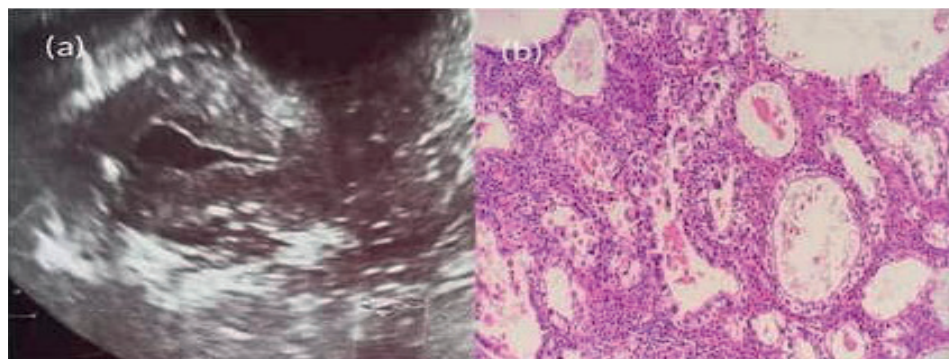
**Discussion:** Clear cell carcinoma of endometrium is a rare malignancy and it originates from the Müllerian duct. Studies showed that in-utero exposure of synthetic non-steroidal estrogens and diethyl stilbestrol (DES) is a cause of clear cell carcinoma. Also genetic factors, human papilloma virus infection, and external or environmental factors were found to be associated with the occurrence of clear cell carcinoma.

**Conclusion:** In this current case, a case of endometrial clear cell carcinoma in a postmenopausal woman presenting with vaginal spotting and diagnosed with repeated Pipelle endometrial biopsies was presented. Further evaluation is indicated in all women with postmenopausal bleeding when vaginal bleeding continues or recurs although no pathological condition was reported in the endometrial biopsy results.

**Keyword:** Clear cell carcinoma

### References

1. Dijkhuizen FP, Mol BW, Brölmann HA, et al. The accuracy of endometrial sampling in the diagnosis of patients with endometrial carcinoma and hyperplasia: a meta-analysis. *Cancer*. 2000; 89: 1765-72.
2. ACOG committee opinion no. 734: The role of transvaginal ultrasonography in evaluating the endometrium of women with postmenopausal bleeding. *Obstet Gynecol*. 2018; 131: e124-9.
3. Narice BF, Delaney B, Dickson JM. Endometrial sampling in low-risk patients with abnormal uterine bleeding: a systematic review and meta-synthesis. *BMC Fam Pract*. 2018; 19: 135.
4. Heo EJ, Park JM, Lee EH, Lee HW, Kim MK. A case of perimenopausal endometrial cancer in a woman with MSH2 germline mutation. *J Menopausal Med*. 2013; 19: 143-6.
5. Choi SJ, Kim JE, Kim HS, Choi HY. Clear cell adenocarcinoma of the uterine cervix in a 15-year-old girl: A case report. *J Korean Soc Radiol*. 2013; 69: 321-5.
6. Mittendorf R. Teratogen update: Carcinogenesis and teratogenesis associated with exposure to diethylstilbestrol (DES) in utero. *Teratology*. 1995; 51: 435-45.
7. Fadare O, Liang SX, Ulukus EC, et al. Precursors of endometrial clear cell carcinoma. *Am J Surg Pathol*. 2006; 30: 1519-30.
8. Liebrich C, Brummer O, Von Wasielewski R, et al. Primary cervical cancer truly negative for high-risk human papillomavirus is a rare but distinct entity that can affect virgins and young adolescents. *Eur J Gynaecol Oncol*. 2009; 30: 45-8.



**Figure 1.** (a). Ultrasonographic image showing a fluid accumulation in the cavity without endometrial thickening. (b). Histomorphology of clear cell carcinoma of endometrium- abundant clear cytoplasm, hobnailing appearance and hyperchromatic, pleomorphic and prominent nucleoli

**[OP-012]****Interstitial Cystitis/Painful Bladder Syndrome (IC/PBS)**

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**Aim:** IC/PBS is a chronic, complex disease that mainly affects the bladder and causes various difficult symptoms. It is characterized by frequent urination and inflammation of the bladder membrane, which causes recurrent, often severe discomfort. Interstitial cystitis is still difficult to diagnose and treat, as its exact causes are unknown and it can mimic other urinary tract disorders. The way patients reacted to treatment varied greatly. In addition to emphasizing the importance of the interdisciplinary team in the diagnosis and treatment of this difficult disorder, the goal was to review the methodology, research and management of interstitial cystitis/bladder pain syndrome (IC/PBS). After a comprehensive history and physical examination, diagnostic tests including urinalysis, urine culture, cystoscopy, bladder biopsy, urodynamic test, potassium test and urine markers, phenotyping, ultrasound, endoscopy, laparoscopy, pelvic imaging and bladder hydrodistension are performed. It is extremely difficult to make a definitive early diagnosis because there is no known screening method for interstitial cystitis/painful bladder syndrome. The epidemiology of this disease has been the focus of some studies. As a result, prevalence data are still scarce. A survey-based prevalence study found that 1 out of 9 men and 2 out of 7 women met the above-mentioned criteria. According to other studies, the incidence is higher in women and the prevalence is estimated to be over 6%. According to the age group, men aged 56-74 and women aged 50-59 have the highest prevalence. Between three and eight million women and one to four million men are thought to have IC/PBS. Since many men are diagnosed with chronic prostatitis, the actual number of affected men is probably underestimated. According to one study, the ratio

is five to one, which indicates a female predisposition. According to another study, the prevalence is only 8 per 100,000/16. It is thought that up to 400,000 patients are affected by IC/PBS, and women between the ages of 50 and 69 account for about 90% of cases. Although there is very little information about children suffering from IC/PBS, it is generally accepted that the prevalence in the pediatric population is extremely low.

**Conclusion:** IC/PBS is a chronic, long-term disease that can have a major impact on the physical, mental and social health of the patient and the quality of life. It is often accompanied by a number of physical and psychological comorbidities and is difficult to control with intervention alone. For the best patient care, an interprofessional team approach is required, which includes different areas of expertise. General practitioners, specialist nurses, urologists, pain management specialists, gynecologists, urogynecologists, pharmacists, nutritionists, social workers, physiotherapists and mental health specialists are all included in the list of health professionals. Improving the quality of life and general well-being of patients and ensuring evidence-based care requires health professionals to work together in a patient-centered manner.

**Keywords:** Painful bladder syndrome, healthcare professionals, interstitial cystitis

**References**

1. Jiang YH, Jhang JF, Hsu YH, Kuo HC. Usefulness of urinary biomarkers for assessing bladder condition and histopathology in patients with interstitial cystitis/Bladder pain syndrome. *Int J Mol Sci.* 2022; 23: 12044.
2. Watanabe D, Akiyama Y, Niimi A, et al. Clinical characterization of interstitial cystitis/bladder pain syndrome in women based on the presence or absence of Hunner lesions and glomerulations. *Low Urin Tract Symptoms* 2021; 13: 139-43.
3. Johnson EV, Bachmann M, Yani MS, et al. Reducing pain by improving brain and muscle activity with motor cortical neuromodulation in women with interstitial cystitis/bladder pain syndrome: a study protocol for a randomized controlled trial. *Trials.* 2024; 25: 609.
4. Lim Y, Leslie SW, O'Rourke S. Interstitial cystitis/bladder pain syndrome. 2024. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024.

## [OP-013]

## Surgical Management of Chronic Abscessed Periurethral Cyst

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**Aim:** Periurethral cysts are exceedingly rare. Differential diagnoses include inclusion cysts, urethral caruncle, Skene's gland cyst, and urethral malignancies.<sup>1</sup> Diagnosis of periurethral cysts is typically established through physical examination. Retrograde urethrography is utilized, particularly for distinguishing urethral caruncle, while imaging modalities such as MRI and ultrasound are used for other differential diagnoses.<sup>2</sup> Patients may be asymptomatic or present with obstructive symptoms due to compression on the urethra, such as urgency, frequent urination, or dysuria. Abscess formation due to cyst infection is an uncommon occurrence. In this case, we discuss the management of a periurethral cyst that repeatedly developed into abscesses.

**Case:** A 30-year-old female patient (G2P2Y2) with no known comorbidities or history of previous surgery presented to our clinic with a periurethral abscess approximately 4×5 cm in size, completely obstructing the vaginal introitus. The patient was started on intravenous ciprofloxacin 400 mg twice daily and metronidazole 500 mg twice daily for abscess treatment. On the first day of antibiotic therapy, the abscess spontaneously ruptured and drained. Intravenous antibiotic therapy was continued for a total of 10 days. From the patient's history, it was learned that the periurethral abscess had recurred and drained four times within the past year. Surgical intervention was planned for the patient. Four weeks after antibiotic therapy, the patient underwent surgery (preoperative image: Figure 1). Intraoperatively, the relationship between the cyst and the urethra was assessed using a transurethral catheter. Cyst capsule excision was then initiated. Due to chronic abscess formation, the tissues were

severely fragile. While excising the cyst capsule, external urethral meatus damage occurred due to tissue fragility (Figure 2, 3). Intraoperative cystoscopy was performed, confirming intact urethra and bladder. The periurethral cyst capsule was excised, and the external urethral meatus was repaired (Figure 4, 5). The patient was managed with a 16F silicone Foley catheter for three weeks. After three weeks, the catheter was removed following bladder training. At the third postoperative week, complete healing of the external urethral meatus was observed (Figure 6). At the fourth postoperative week follow-up, the patient exhibited no voiding dysfunction. Ultrasound performed post-void showed no residual urine in the bladder. Pathological analysis reported periurethral cyst and chronic inflammation.

**Discussion:** Periurethral cysts are rare and often asymptomatic. Obstructive symptoms may occur due to compression on the urethra.<sup>3</sup> As seen in our case, cyst infection leading to abscess formation is particularly uncommon. For patients with abscess formation, dual intravenous antibiotic therapy effective against both aerobic and anaerobic bacteria should be administered. Surgical excision of the cyst capsule is necessary for definitive treatment. However, in cases with chronic abscesses, as in our patient, tissue frailty due to histiocytic activity can result in tissue fragility, increasing the risk of urethral injury during excision. This can lead to iatrogenic urethral obstruction.

**Conclusion:** Periurethral cyst excision following abscess treatment should always be performed under intraoperative catheter guidance, and the catheter should remain in place until tissue healing is achieved to prevent urethral obstruction.

**Keywords:** Periurethral cyst, chronic abscessed periurethral cyst, surgical management of periurethral cyst

### References

1. Dmochowski RR, Ganabathi K, Zimmern PE, Leach GE. Benign female periurethral masses. *J Urol.* 1994; 152: 1943-51.
2. Lucioni A, Rapp DE, Gong EM, Fedunok P, Bales GT. Diagnosis and management of periurethral cysts. *Urol Int.* 2007; 78: 121-5.
3. Siegel CL, Middleton WD, Teefey SA, Wainstein MA, McDougall EM, Klutke CG. Sonography of the female urethra. *AJR Am J Roentgenol.* 1998; 170: 1269-74.



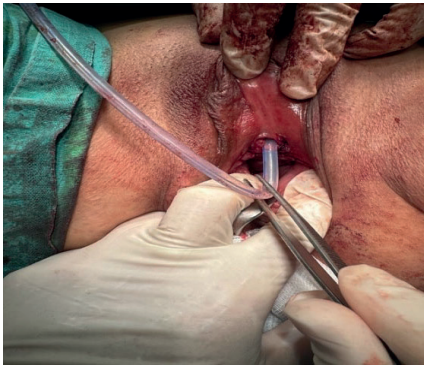
Figure 1. Preoperative image-after treatment of active abscess



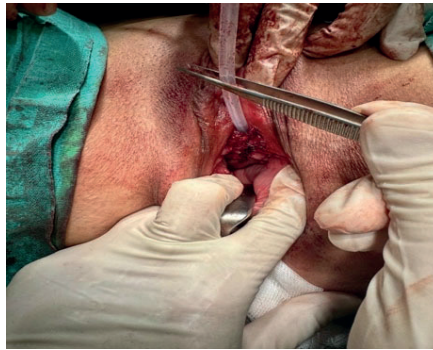
Figure 2. Intraoperative-external urethral meatus damage



Figure 3. Intraoperative-external urethral meatus damage



**Figure 4.** Intraoperative external urethral meatus repair



**Figure 5.** Intraoperative external urethral meatus repair



**Figure 6.** Third postoperative week-healed external urethral meatus

## [OP-014]

### Site-specific Bilateral Sacrospinous Hysteropexy vs. Pelvic Organ Prolapse Correction with Six-Arm OPUR Mesh

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**Introduction:** Nowadays of particular interest are surgical techniques for the correction of anterior and apical prolapses that could reduce risks associated with large prostheses and provide high-quality treatment.<sup>1,2</sup> This paper aims to compare the effectiveness and safety of site-specific surgeries, namely bilateral sacrospinous hysteropexy and pelvic organ prolapse (POP) correction with six-arm OPUR mesh.

**Materials and Methods:** Patients underwent POP correction with a six-arm OPUR mesh implant until 2022 (n=203). The prospective comparative study started in 2022 and included two groups: 1) site-specific surgery with bilateral hysteropexy; 2) POP correction with six-arm OPUR mesh implant. For significant cystoceles and paravaginal defects (n=60), the preference was

still given to the OPUR mesh implant. Site-specific correction was carried out by restoring the rectovaginal fascia by fixing it to the posterior surface of the cervix. The correction of all anterior compartment defects was carried out by dissection and straightening of the pubocervical fascia with subsequent fixation around its perimeter to the prosthetic tape. The surgery was completed with sacrospinous hysteropexy through an anterior or posterior approach. Patients were followed up 1, 3, 6 and 12 months after the surgery, and then annually. Recurrence was defined as the presence of any grade 2 or higher compartment prolapse.

**Results:** A total of 311 patients were included in the study. The prospective part enrolled 60 patients who underwent OPUR implantation and 48 patients who underwent site-specific bilateral sacrospinous hysteropexy. The mean time of each procedure did not exceed 90 minutes. After 1 year, two women (4.2%) experienced uterine prolapse recurrence after site-specific bilateral sacrospinous hysteropexy. Sixteen patients (7.8%) developed uterine prolapse recurrence, and 3 patients (1.5%) were diagnosed with cystocele recurrence after POP correction with six-arm OPUR mesh. The peri- and postoperative complications were classified as Clavien-Dindo grade I-II and observed in 7 patients (6.5%) with no differences between two groups.

**Conclusion:** Site-specific sacrospinous hysteropexy seems to be a promising surgical option for POP correction. The technique allows to minimize mesh material used and repair defects of pubocervical and rectovaginal fascias simultaneously. The potential of site-specific surgery for repair of significant paravaginal defects and large cystoceles remains controversial.

**Keywords:** Pelvic organ prolapse, surgery, mesh, hysteropexy, site-specific

#### References

1. Richardson AC. The rectovaginal septum revisited: its relationship to rectocele and its importance in rectocele repair. *Clin Obstet Gynecol.* 1993; 36: 976-83.
2. Uhlenhuth E, Nolley GW. Vaginal fascia, a myth. *Obstet Gynecol.* 1957; 10: 349-58.



## [OP-015]

## Vaginal and Laparoscopic Site-specific Operations: Multicenter Study

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**Introduction:** To develop anatomical restoration and augmentation all pelvic “ligaments” using tapes with preserving vaginal tissues and it’s elasticity.

**Materials and Methods:** Procedure begins with transverse incisions of anterior and posterior vaginal wall close to fornixes, mobilization of the rectovaginal and pubocervical fascia, identification SSL, uterosacral ligaments. We use 12 mm wide low elastic polypropylene or titanium tapes. Tape pass through SSL (95%) or to sacral promontory. It’s important that we always do bilateral, symmetrical fixation with both arm of the tape. Correction of posterior compartment performed by modified Zimmerman and Sheth<sup>1</sup>. We fix tape to the center of anterior part of cervix, and correct high transverse defect of platelet contractile force (PCF). Fixation of the sling to anterior part of the cervix and PCF in the center and 5 cm laterally on each side to correct all defects correct high transverse defect of PCF by fixing it to cervix and to the sling of PCF high transverse defect of Rift Valley fever (Figure 1, 2).

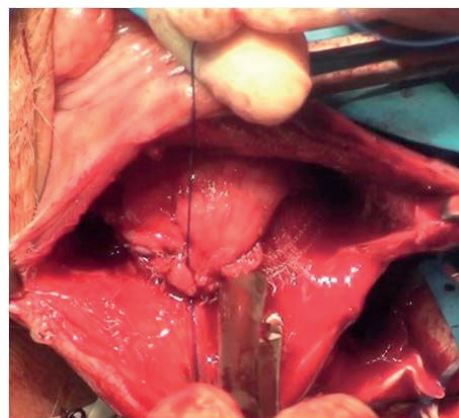
**Results:** Since 2019 we did 340 procedures in 4 clinics performed by senior surgeons. Indication was: different types of symptomatic pelvic organ prolapse (POP) 2-4 stages (POPQ). Simultaneous operations were: trachelectomy in 8.8%, Lichen sclerosus supracervical hysterectomy in 8.8%, tension-free vaginal tape-O in 23% cases, PB repair (29%) include EAS repair (3%). Operation time was 90±25 min. Blood loss never exceed 250 mL. We have 1 bladder injury - repaired during surgery without complications. We have 3% of hematoma of paravaginal space 3-5 cm treated mostly conservative - without consequences. In all cases pain was mild (1-4 VAS) localized in perineal body or buttocks treated with NSAID not more 4-9 days. There were statistical improvements of functional results of symptoms before and after operation: Pelvic floor distress inventory-20 115.5/48.7 ( $p<0.01$ ), pelvic floor impact questionnaire-7 68.7/14.4 ( $p<0.01$ ). Sexually active patients (58%) report improvements according female sexual function index ( $p<0.01$ ). There was significant improvement of symptoms: Bulge 96 to 0%, pelvic pain -14 to 3%, dyspareunia 29 to 3%, obstructive urination 29 to 0%, frequency 47 to 6%, urgency -11,7 to 2%, stress incontinence -23 to 7%, obstructive and dyssynergic defecation 17 to 3%, AI 7 to 0%, nocturia 29% to 2%. We noted 20 (6%) asymptomatic cases of cystocele and apical prolapse 2<sup>nd</sup> degree without reoperation.

**Conclusion:** Mid-term results make possible to consider this approach as effective minimally-invasive method of “functional pelvic surgery”<sup>2</sup>. Data confirm that in spite of FDA ban vaginal mesh we believe that synthetic materials in POP surgery provides good functional and anatomic results and its future of pelvic reconstructive surgery.

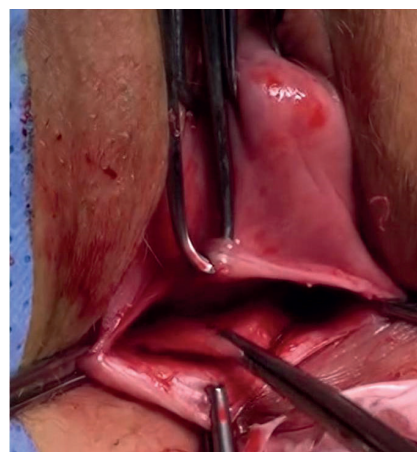
**Keywords:** Ligaments, site-specific, POP, surgery, vaginal

### References

1. Zimmerman CW, Sheth SS. Anterior, posterior and apical vaginal reconstruction with and without bolsters. *Best Pract Res Clin Obstet Gynaecol.* 2011; 25: 167-74.
2. Petros P, Liedl B, Goeschen K. Update integral theory paradigm-A contemporary collagen-based management system for pelvic floor dysfunctions. *Continence.* 2024; 12: 101698.



**Figure 1.** Fixation of cervix and sling to PCF  
PCF: Platelet contractile force



**Figure 2.** High transverse defect of rectovaginal fascia

**[OP-016]****Transvaginal Mesh Surgery for Stage IV Urogenital Prolapse “Megalapse”**

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**Introduction:** In most cases, treatment of complete prolapse “megalapse” is limited to removal of the uterus, which for a while, indeed, corrects prolapse, but does not eliminate the defects of the pelvic fascia.<sup>1,2</sup> The aim of the study is to assess the effectiveness and safety of “megalapse” correction with a six-sleeve mesh implant OPUR.

**Materials and Methods:** Twenty-four patients with complete prolapse were included in the study. The degree of prolapse was assessed using pelvic organ prolapse quantification (POP-Q). A six-sleeve mesh implant was employed for prolapse correction. For select patients (n=18), follow-up was over 5 years. The following questionnaires were used to assess the quality of life and sexual function: Pelvic floor distress inventory (PFDI)-20, pelvic floor impact questionnaire (PFIQ)-7 and Pittsburgh sleep quality index-12. Follow-up examinations were performed one month after surgery and once a year thereafter.

**Results:** Twenty-one patients (87.5%) achieved the desired anatomical outcomes (≤I according to the POP-Q System). No postoperative dyspareunia was detected. Quality of life improved in 21 women (87.5%) according to PFDI-20 and in 21 women (87.5%) according to PFIQ-7, both 3 months and 5 years after surgery. Bilateral ureterohydronephrosis was detected in 11 patients (52%), which resolved in 10 patients (91%) after transvaginal prolapse repair. One patient (9%) required bilateral ureterocystostomy. Preoperative stress urinary incontinence was detected in 10 patients, and in 5 of them it resolved after prosthesis placement. The other 5 as well as 2 women who developed *de novo* incontinence underwent delayed transobturator sling urethropexy. Overall, *de novo* urinary incontinence occurred in 9 patients (37.5%). Recurrence of hysteroptosis was observed in 3 women, defined as stage ≥II prolapse. All patients with prolapse recurrence were diagnosed with cervical hypertrophy/elongation, which increases the pressure on the apical bands prompting sleeve migration from the sacrospinous ligaments and resulting in recurrence.

**Conclusion:** Transvaginal mesh surgery for “megalapses” showed high efficiency and safety. Recovery of pelvic anatomy in the majority of cases leads to restoration of urinary outflow through the upper urinary tract. In case of cervical hypertrophy/elongation, it is recommended to combine prolapse correction with cervical conization to reduce the risk of recurrence.

**Keywords:** Pelvic organ prolapse, surgery, mesh, OPUR, megalapse

**References**

1. Lucero M, Shah AD. Vaginal hysterectomy for the prolapsed uterus. Clin Obstet Gynecol. 2010; 53: 26-39.
2. Diwan A, Rardin CR, Kohli N. Uterine preservation during surgery for uterovaginal prolapse: a review. Int Urogynecol J Pelvic Floor Dysfunct. 2004; 15: 286-92.

**[OP-017]****Retrospective Analysis of Consecutive Correction of Pelvic Organ Prolapse and Stress Urinary Incontinence**

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**Introduction:** Pelvic organ prolapse (POP) and stress urinary incontinence (SUI) are common conditions among women of all ages and are often found together. In such cases, surgical correction of POP itself might be sufficient to restore continence without simultaneous surgical correction of SUI. At the same time, there is currently no consensus regarding the mechanisms of *de novo* urinary continence, the frequency of correction of urinary incontinence after POP treatment and the need for simultaneous correction of the two conditions.<sup>1,2</sup> The aim of the study was to evaluate the results of sequential correction of POP and SUI and the feasibility of simultaneous surgery for POP and SUI.

**Materials and Methods:** The retrospective study included data from patients with antero-apical POP associated with SUI. All patients underwent surgical treatment involving transvaginal correction of POP with a mesh implant or transsacrospondyl sling with reconstruction of the anterior fascia (hybrid technique). In the preoperative period, the patients were examined in a gynecological chair, and a cough test was performed with and without prolapse reposition. Also, at various time intervals after surgery (1,3,6,12 months), patients were examined for incontinence. If SUI persisted, surgical treatment was performed no earlier than 3 months after POP correction.

**Results:** A total of 58 patients were included in the final analysis. The follow-up period was at least one year after surgery. After correction of prolapse, *de novo* continence was observed in 36 patients (62%). In 15 women (25.9%) due to persistence of SUI, a midurethral sling was implanted at the second stage. Seven patients (12.1%) had mild SUI after POP correction that did not require surgery.

**Conclusion:** *De novo* continence was noted in 62% of cases, while only 25.9% of patients required additional SUI treatment, which casts doubt on the feasibility of simultaneous surgical correction of POP and SUI. A subsequent comparative study may identify potential indications for simultaneous correction of POP and SUI to achieve the best results.

**Keywords:** Pelvic organ prolapse, stress urinary incontinence, SUI, surgery, midurethral sling

**References**

1. Cameron AP, Smith AR, Lai HH, et al. Bowel function, sexual function, and symptoms of pelvic organ prolapse in women with and without urinary incontinence. Neurourol Urodyn. 2018; 37: 2586-96.
2. van der Ploeg JM, van der Steen A, Zwolsman S, van der Vaart CH, Roovers J. Prolapse surgery with or without incontinence procedure: a systematic review and meta-analysis. BJOG. 2018; 125: 289-97.

**[OP-018]****Outcomes of Repeat Surgery for Recurrent Stress Urinary Incontinence in Women**

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**Introduction:** The aim of the study is to present a single-center experience in management of recurrent stress urinary incontinence (SUI) in women and to evaluate the efficacy of repeat surgery.<sup>1,2</sup>

**Materials and Methods:** The retrospective study included women with recurrent SUI. The patients underwent surgical correction with a midurethral sling or Burch colposuspension. Preoperatively, assessment of urinary incontinence was carried out. Postoperatively, SUI, the degree of urinary incontinence and quality of life were assessed. Other data was collected at a follow-up visit.

**Results:** A total of 179 patients underwent surgical correction of SUI; the study included data on 10 of them with recurrent SUI. The age of the women was 32-74 years (median-65 years, interquartile range-28). Before the interventions carried out within the current study, nine patients had undergone single surgical correction of SUI and one patient-three corrections in other institutions. At the time of the first examination, the women used 2-6 pads per day. The following types of treatment were performed in the

center: Tension-free vaginal tape (TVT) -5 procedures; laparoscopic Burch colposuspension - 4; simultaneous laparoscopic revision of the Retzius space and TVT under laparoscopic control - 2; simultaneous open Burch colposuspension and TVT-1. The median follow-up was 6 months. In two of 10 patients (after primary TVT and TVT-0), laparoscopic Burch colposuspension turned out ineffective. This prompted revision of the Retzius space followed by TVT under laparoscopic control and open Burch colposuspension with TVT, respectively. These interventions restored urinary continence. Complete urinary continence (0 pads per day) was achieved in 50% of cases (6 of 12 operations). Three women (25%) retained mild SUI (1 safety pad per day, international consultation on incontinence questionnaire-short form scores of 2-4); simultaneously, they reported significant improvement in their quality of life. Thus, repeated surgery was effective in 75% of cases (9 of 12). According to the urination disorders assessment scale (urogenital distress inventory-6), five patients had minor disorders (1-3 points). Postoperative frequent urination did not affect the quality of life.

**Conclusion:** The efficacy of surgical treatment of recurrent SUI was 75%. The most frequently chosen procedures for repeat surgeries were TVT and Burch colposuspension, as well as their combinations.

**Keywords:** Recurrent stress urinary incontinence, recurrent SUI, midurethral sling, Burch colposuspension

**References**

1. Tincello DG, Armstrong N, Hilton P, Buckley B, Mayne C. Surgery for recurrent stress urinary incontinence: the views of surgeons and women. *Int Urogynecol J.* 2018; 29: 45-54.
2. Abdel-Fattah M, Ramsay I, Pringle S, et al. Evaluation of transobturator tension-free vaginal tapes in management of women with recurrent stress urinary incontinence. *Urology.* 2011; 77: 1070-5.

## [OP-019]

## Multi-stage Management of Gynecological Disorders in a Patient with Ewing Sarcoma History: A Case Report

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**Introduction:** Ewing sarcoma is a malignant neoplasm most commonly affecting bones and soft tissues and characterized by aggressive clinical course.<sup>1</sup> Treatment, which includes high-dose systemic chemotherapy (CT) and local modalities like irradiation and/or surgery, is currently effective, resulting in an overall 5-year survival rate of 70% in localized Ewing sarcoma and up to 20% in metastatic stages.<sup>2</sup> Despite favorable survival figures, many patients experience long-term sequelae of primary disease treatment, which may significantly affect their quality of life. We present a clinical case of a 32-year-old patient with severe sequelae of Ewing sarcoma and profound pelvic organ damage as a result of primary treatment.

**Materials and Methods:** A 32-year-old patient presented to the department of obstetrics and gynecology at clinic "K+31 West" with complaints of primary amenorrhea throughout her life and inability to engage in sexual intercourse. At the age of 7 (1998), she was diagnosed with Ewing sarcoma of the left and right pubic bone, left ischial bone, a generalized form with multiple lung, right humerus metastases. She underwent combined treatment consisting of 6 courses of high-dose polychemotherapy, 2 courses of radiation therapy followed by peripheral stem cell transplantation (PSC). She was removed from oncology follow-up in 2011 (at the age of 18 y.o). As the result of the primary disease treatment the patient has primary amenorrhea and disability to lead a sexually active life due to vaginal atresia. Examination revealed vaginal diameter corresponding to the diameter of an index finger, length of vagina 2.5 cm (penetration depth of one phalanx), and a blind vaginal end. Mucosa visible for examination was atrophic. The tissues were significantly fibrotic and rigid. Transrectal pelvic ultrasound: signs of rudimentary uterus, ovarian hypoplasia. The patient was scheduled for surgical treatment involving vaginal reconstruction and diagnostic laparoscopy with platelet-rich plasma (PRP) injection into the ovarian area. In the first stage, to prepare for surgery and improve the elasticity of the external genitalia, laser photothermolysis were performed using the Erbium (Er:YAG) Fotona laser in combination with autologous PRP injection (RegenLab Cellular Matrix™ in combination with hyaluronic acid) into the area of the vaginal vault, lateral walls and the vestibule. This regenerative therapy course consisted of 3 sessions at intervals of 1 month. Following the course, improvement in tissue elasticity and hydration was noted, the length of the vagina increased to 2 phalanges of

the finger (4.5 cm). In the second stage, surgical treatment was performed. It started with diagnostic laparoscopy, during pelvic organ revision significant uterine hypoplasia was observed. The ovaries appeared as whitish cords with no identifiable follicular apparatus. The fallopian tubes were pale pink, with the fimbrial end represented by single, atrophic fimbriae. Autologous PRP (RegenLab BCT "Blue") was injected bilaterally into the ovaries (10 mL per side). The surgery continued with a vaginal approach where a tunnel was created by dissecting the anterior and posterior walls of the earlier preexistent vagina. Vaginal reconstruction was performed under rectal speculum guidance. The adequacy of the reconstructed neovagina was assessed with laparoscopic assistance and ultrasound navigation. The base of the formed vagina was the cervix, which was not clearly visualized. Two transverse sutures (anti-plastic) were placed on each side to create a complete vaginal entrance.

**Results:** The comprehensive treatment plan included not only pre-operative and operative stages. Much attention was paid to postoperative management: to stimulate regenerative processes, a collagen substrate based on type I collagen containing live dermal fibroblasts and epidermal keratinocytes, pre-soaked in the patient's autologous PRP, was applied intravaginally for 3 days. Subsequently, for 10 days, the patient used a specialized gel composition based on a liposomal antioxidant-phospholipid complex -1 applicator intravaginally daily. Additionally, the patient was instructed to use the Dr. Arabin gynecological dilator, size S, in combination with a 0.1% estriol-containing cream nightly. Systemic hormone-replacement therapy (HRT) (estradioli hemihydrate 2 mg/dydrogesterone 10 mg) was also prescribed daily. One month after the surgery, epithelialization of the anterior and posterior vaginal walls was observed, with areas of persistent granulation tissue in the dome region. The vaginal length was 9 cm. Due to HRT using, the patient exhibited a restored menstrual cycle.

**Conclusion:** This clinical case demonstrates the efficacy of a multi-stage approach in restoring gynecological dysfunction in a patient with a history of Ewing's sarcoma. The comprehensive treatment plan, encompassing laser and PRP therapy, surgical intervention, regenerative therapy, as well as systemic and local HRT, contributed to the restoration of the menstrual cycle and improved the patient's quality of life. This clinical observation highlights the importance of an individualized approach to treating women with complicated medical histories and underscores the need for ongoing monitoring throughout their lives.

**Keywords:** Ewing's sarcoma, primary amenorrhea, vaginal reconstruction, regenerative therapy, HRT

### References

1. Shmakov R.G. Akhmedova AI, Kozyrko EV. Pregnancy management in women with malignant tumors of bones and soft tissues (osteosarcoma and Ewing's sarcoma) - Obstetrics and Gynecology. 2019; 9: 187-91.
2. Nisichenko OA, et al. Ewings sarcoma treatment - Sarcomas of bones, soft tissues and skin tumors. 2020; 3: 40-6.

**[OP-020]****Functional Magnetic Stimulation in Women's Urinary Incontinence**

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**Introduction:** Urinary incontinence (UI) is a common women's problem, especially in postmenopausal age, frequently related with the pelvic organ prolapse (POP). Functional magnetic stimulation (FMS) is a newer, effective therapy method for UI based on external treatment of pelvic floor with powerful magnetic field. FMS is convenient, non-invasive treatment inducing the automated and standardized pelvic floor muscles contractions.

**Materials and Methods:** Prospective study has started in October 2017, using the FMS device (Magneto Stym, Iskra Medical, Slovenia) with magnetic field power of 2 Tesla and frequency range of 1-80 Hz. The patient seated dressed on an electromagnetic chair. Magnetic stimulation of the muscles is conducted by an electromagnetic coil built into the seat and controlled by an external unit. All patients were treated with FMS twice a week for 8 weeks (16 therapies in total) using the treatment protocol adequate for the type of UI. The results were obtained by the standardized self-evaluation questionnaires [pelvic floor distress inventory (PFDI)-20, pelvic floor impact questionnaire (PFIQ)-7] and collected before and after finishing the complete therapy.

**Results:** From totally 179 women, 56 (31.3%) patients suffered from stress urinary incontinence (SUI), 86 (48.0%) from mixed urinary incontinence (MUI) and 37 (20.7%) from urge urinary incontinence (UUI). POP (gr.≤3) has been also occurred in 35 (19.6%) patients, predominantly in menopausal ones. In patients with SUI, 80.3% were completely dry after the therapy, 16.1% showed significant improvement and 3.6% had not any improvement. In patients with MUI, 70.9% were completely dry, 26.8% showed significant improvement and 2.3% had not any improvement. In patients with UUI, 59.5% were completely dry, 29.7% showed significant improvement and 10.8% had not any improvement. Totally 128 (71.5%) patients have been completely satisfied with therapy, 43 (24.0%), has been partially satisfied, but only 8 (4.5%) patients has not been satisfied as expected (Figures 1-3). FMS is convenient, non-invasive therapy method for urinary incontinence based on extracorporeal treatment of pelvic floor with powerful magnetic field. FMS in pelvic medicine is already in use since the 1990s, but modern technology and improved devices makes this method even better and more efficient. The achieved patient's improvement and their positive feedback confirm previous literature reports that magnetic stimulation is an effective non-invasive therapy for all types of incontinence. Since patient satisfaction is an important part of every rehabilitation and

medical treatment, the goal is achieved with magnetic stimulation therapy. It is, however, necessary to emphasize that the presented results are based on the patient's personal observations revealed in a questionnaire (PFDI-20, PFIQ-7). With the aid of the electromagnetic chair, patients can learn how to perform pelvic floor muscle exercises themselves. This is going to help them maintain muscle strength after the conclusion of the therapy. The 8-week therapy cycle offers a good basis for the long-term pelvic floor muscles ability for urine flow control. However, the muscles need to stay active in order to maintain their strength and function. This is achieved by performing regular Kegel exercises correctly by the patients themselves. One of the limitations of the present study is the lack of a control group. It is difficult to design an effective placebo treatment because the patients are aware of the strong contractions of the pelvic floor muscles during the treatment. Further studies are required to determine other diagnostic parameters and need to include a control group. However, based on the presented results, it can be concluded that magnetic stimulation therapy offers a suitable alternative treatment option for all types of female urinary incontinence. Positive feedback and improvement in urinary incontinence symptoms as presented in our study confirms previous literature reports that magnetic stimulation is an effective, non-invasive therapy for all types of incontinence.

**Conclusion:** FMS has presented as a reliable and repeatable, effective treatment for UI in females with encouraging initial efficacy and perspective future. FMS is suitable and compliant treatment option for all types of women's UI. Favourable feedback and improvement in UI symptoms presented in our study confirms the other relevant literature reports.

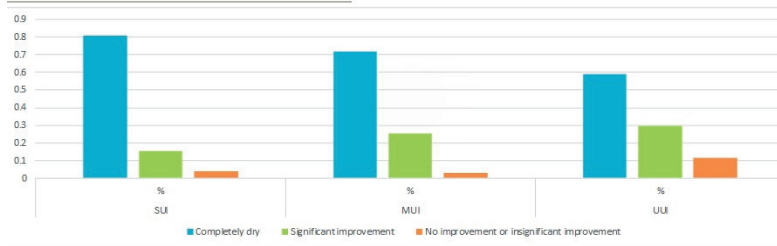
**Keywords:** Women, urinary incontinence, magnetic stimulation

**References**

1. Lukanović A, Kunič T, Lugovski S, Verdenik I, Lukanović D. Extracorporeal magnetic stimulation for the treatment of pelvic floor dysfunction. Is it effective? *EJOGRB*. 2016; 206: 258.
2. Štrumbelj T, Logar T, Podnar P, Koman Mežek Z, Zorec B. Stress incontinence and after childbirth incontinence treatment using Magneto Stym neuromuscular stimulator. *Physiotherapia Croatica*. 2016; 14 (Suppl. 1): 42-5.
3. Lukanović D, Kunič T, Batkoska M, Matjašič M, Barbič M. Effectiveness of magnetic stimulation in the treatment of urinary incontinence: A systematic review and results of our study. *J Clin Med*. 2021; 10: 5210.
4. Braga A, Castronovo F, Caccia G, et al. Efficacy of 3 Tesla functional magnetic stimulation for the treatment of female urinary incontinence. *J Clin Med*. 2022; 11: 2805.
5. Antić A, Pavčnik M, Lukanović A, Matjašič M, Lukanović D. Magnetic stimulation in the treatment of female urgency urinary incontinence: a systematic review. *Int Urogynecol J*. 2023; 34: 1669-76.

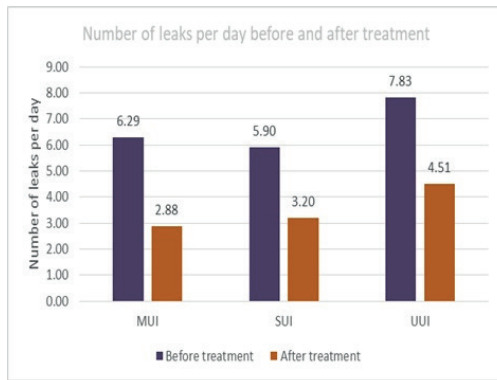
FMS therapy

Treatment results



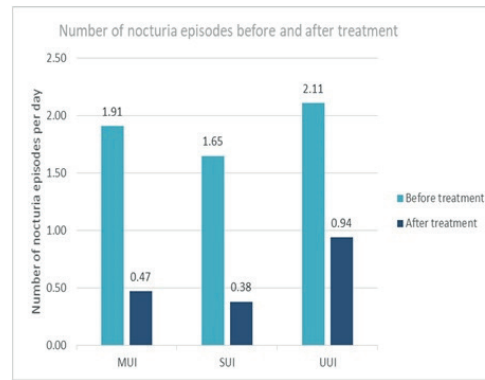
**Figure 1.** Treatment results. Significant therapy improvement has been achieved in all group of patients

FMS: Functional magnetic stimulation; SUI: Stress urinary incontinence; MUI: Mixed urinary incontinence; UUI: Urge urinary incontinence



**Figure 2.** Frequency of leakage. The frequency of leakage significantly decreased in all group of patients

SUI: Stress urinary incontinence; MUI: Mixed urinary incontinence; UUI: Urge urinary incontinence



**Figure 3.** Nocturia episodes. Significant reduction of nocturia episodes has been reported in all group of patients

SUI: Stress urinary incontinence; MUI: Mixed urinary incontinence; UUI: Urge urinary incontinence

**[OP-021]****Investigation of Sexual Function Functions of Patients Who Underwent Tension-free Vaginal Tape (TVT) Surgery in the Treatment of Stress Incontinence**

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**Introduction:** Female sexual dysfunction is a problem that includes biological and psychological effects. It is accepted that urinary incontinence, shame, fear of odor has a negative effect on sexuality. Some studies on sexual function after urinary incontinence surgery report deterioration, some improvement, and some no difference. In this study, we aimed to evaluate sexual function functions in patients diagnosed with stress urinary incontinence (SUI) and who underwent Tension-free vaginal tape (TVT) surgery.

**Materials and Methods:** Twenty-seven sexually active patients who were diagnosed with SUI and underwent TVT surgery at the Ankara Etlik City Hospital Urogynecology Clinic between May 2023 and September 2024 were included in the study. After recording the demographic data of the patients, a basic clinical evaluation was performed. All patients included in the study were administered the pelvic organ prolapse-urinary incontinence sexual function questionnaire (PISQ)-12 and international consultation on incontinence questionnaire-short form (ICIQ-SF) questionnaires.

**Results:** Twenty-seven patients were included in the study, and the mean age of the patients was  $49.23 \pm 9.45$ . The mean body mass index was  $30.74 \pm 5.81$ . The median value of gravida was 3 (2-11). The median value of parity was 3 (2-9). The preoperative ICIQ-SF scale value of the patients was  $11.53 \pm 6.24$ . The postoperative PISQ-12 scale value of the patients was  $21.33 \pm 7.01$ . A positive correlation was observed between the ICIQ-SF value and the PISQ-12 value ( $r=0.646$   $p<0.05$ ).

**Conclusion:** As a result of our study, the high ICIQ-SF values of patients with SUI diagnosis included in the study are valuable in terms of showing that women who were decided to have an operation were symptomatic. Although a positive correlation was observed between the ICIQ-SF value and the PISQ-12 value, a patient-specific evaluation is required. Our study shows that women with incontinence problems have a negative impact on their quality of life and sexual functions. Our study is important in terms of creating awareness about the issue, early detection of problems and improving quality of life.

**Keywords:** Tension-free vaginal tape, stress urinary incontinence, international consultation on incontinence questionnaire-short form

**References**

1. Braga A, Castronovo F, Ottone A, et al. Medium term outcomes of TVT-Abbrevio for the treatment of stress urinary incontinence: efficacy and safety at 5-year follow-up. *Medicina (Kaunas)*. 2022; 58: 1412.
2. Serati M, Braga A, Athanasiou S, et al. Tension-free vaginal tape-obturator for treatment of pure urodynamic stress urinary incontinence: efficacy and adverse effects at 10-year follow-up. *Eur Urol*. 2017; 71: 674-9.

**[OP-022]****Investigation of Clinical Results of Transobturator Tape (TOT) Operation in the Treatment of Stress Incontinence**Zeynep Cansu Aladağ<sup>1</sup>, Ramazan Erda Pay<sup>2</sup><sup>1</sup>Osmaniye State Hospital, Clinic of Obstetrics and Gynecology, Osmaniye, Türkiye<sup>2</sup>Ankara Etlik City Hospital, Clinic of Obstetrics and Gynecology, Ankara, Türkiye

**Introduction:** Urinary incontinence is the involuntary loss of urine that creates social and hygienic problems. According to the World Health Organization, Stress urinary incontinence (SUI) affects 30% of premenopausal women and 60% of postmenopausal women. The gold standard treatment for SUI is surgery. One of the most effective and popular surgical treatment options is the (TOT) operation. The long-term success rates of 80.5-97%, being a minimally invasive procedure and short operation time have made this operation widely performed. In our study, we aimed to examine the clinical results of patients who underwent TOT surgery due to stress urinary incontinence.

**Materials and Methods:** Patients who underwent TOT surgery at Osmaniye State Hospital between 2023 and 2024 were included. Demographic and clinical data of the patients [age, body mass index (BMI), parity, menopausal status, length of stay, preoperative and postoperative examination values, complications] were examined. Patients who could fully access their data within the date range were included in our study.

**Results:** Twenty-two patients were included in the study, the mean age of the patients was  $47.81 \pm 11.31$ . The mean BMI was  $29.70 \pm 3.81$ . The median parity value was 3 (2-6). Seven of the patients (31.8%) were in menopause. Nine of the patients (40.9%) used medical treatment. All of the patients were stress test positive patients. The mean operation time of the patients was  $47.27 \pm 22.02$  minutes. The median value of the hospital stay was 1 (1-2). The postoperative catheterization time of the patients was  $27.27 \pm 8.43$  hours. The preoperative residual urine amount of the patients was  $66.81 \pm 35.77$ . The postoperative residual urine amount of the patients was  $4.77 \pm 8.37$ . The preoperative UDI-6 score of the patients was  $11.77 \pm 3.35$ . Mesh complication was observed in 1 patient (4.5%).

**Conclusion:** All patients included in the study had positive stress test results, preoperative residual amounts were over 50 cc, and high values in UDI-6 indexes indicate that the patients had clinically active complaints of SUI. The complication rate reported after TOT operation was between 10.5% and 31.3%, and our rate was lower. The average operation time is between 20-25 minutes in the literature, and although our operation time seems longer, we think that ours is longer due to the inclusion of the anesthesia period. TOT surgery we apply appears to be a method that can be safely preferred in SUI.

**Keywords:** Transobturator tape, stress urinary incontinence, urinary residual volume

**References**

1. Li YT, Chao WT, Wang PH. Trans-obturator tape (TOT) for stress urinary incontinence (SUI). *Taiwan J Obstet Gynecol*. 2023; 62: 9-11.
2. Wang L, Ye L. Clinical efficacy and safety meta-analysis of different surgical approaches for female stress urinary incontinence. *Arch Esp Urol*. 2024; 77: 479-90.

**[OP-023]****Investigation of Discordance Between Specimen and Ultrasonography Measurements in Vaginal Hysterectomy**

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**Introduction:** Hysterectomy is the second most common gynecologic surgery among women of reproductive age. The primary surgical approaches by which hysterectomies are performed are vaginal, abdominal, or laparoscopic (with or without robotic assistance). In practice, there is an increasing shift from relying on the abdominal approach to more minimally invasive approaches such as vaginal and laparoscopic. While case-specific factors affect the choice of surgical approach, clinically estimated uterine size by bimanual examination, ultrasonography, or both is one of the most important determinants in choosing the final hysterectomy surgical approach. In this study, we aimed to investigate the discordance between specimen and ultrasonography measurements in women who underwent vaginal hysterectomy due to pelvic organ prolapse (POP).

**Materials and Methods:** Forty-nine patients who were diagnosed with POP and underwent vaginal hysterectomy surgery between January 2024 and September 2024 at Ankara Etlik City Hospital Gynecology Clinic and whose data were fully accessible were included in the study. After recording the demographic data, pathology data and clinical data of the patients, statistical analysis was performed.

**Results:** 49 patients were included in the study, the median age was 65 (45-81). The median parity value was 3 (1-7). The median fundus-cervix measurement value of ultrasonography was 43 mm (30-75). The median fundus-cervix measurement value measured in the pathology examination was 45 mm (30-90). The difference between the ultrasonography measurements was not correlated with age. The difference between the ultrasonography measurements was not correlated with parity ( $p>0.05$ ).

**Conclusion:** As a result of our study, the reason for the discordance between the sample and ultrasonography measurements of the patients included in the study was not observed to be correlated with demographic data. Although it is thought that it will also affect the clinical experiences of the people performing the measurement, the result of incorrect calculation of the uterus size may lead to incorrect determination of vascular pedicles or anatomical points and the surgical method may change to a larger incision abdominal laparotomy approach. The study needs to be supported by prospective, large-scale, randomized controlled studies.

**Keywords:** Ultrasonography measurements, vaginal hysterectomy, uterine prolapse

**References**

1. Lee JH, Chae SH, Lee AJ, et al. Evaluation of the distance from the anterior cervicovaginal junction to the anterior peritoneal reflection for anterior colpotomy during vaginal hysterectomy in Korean women. *Medicine (Baltimore)*. 2021; 100: e26941.
2. Pogoda KA, Malinowski A, Majchrzak-Baczmanska D, Wosiak A. The analysis of vaginal hysterectomy results depending on the uterine size. *Ginekol Pol*. 2021; 92: 339-43.

**[OP-024]****Clinical Risk Factors for Uterine Cervical Elongation, Tertiary Center Experiences**Hilal Gökçen Çin Ergin<sup>1</sup>, Atahan Özdoğan<sup>1</sup>, Ramazan Erda Pay<sup>2</sup>, Yaprak Üstün<sup>1</sup><sup>1</sup>University of Health Sciences Türkiye, Etlik Zübeyde Hanım Obstetrics and Gynecology Training and Research Hospital, Clinic of Obstetrics and Gynecology, Ankara, Türkiye<sup>2</sup>Ankara Etlik City Hospital, Clinic of Obstetrics and Gynecology, Ankara, Türkiye

**Introduction:** Pelvic organ prolapse (POP) has become an increasingly common gynecological problem with the increase in life expectancy in the past century. The risk of undergoing at least one surgery to correct this problem is estimated to be approximately 11%. Cervical elongation is frequently associated with POP. Since cervical elongation may lead to recurrence of POP after uterus-sparing surgery, it is very important to determine the risk factors for cervical elongation in women with POP. In this study, we aimed to determine the predictors of cervical elongation in women who underwent vaginal hysterectomy due to POP.

**Materials and Methods:** Thirty-nine patients who were diagnosed with POP and underwent vaginal hysterectomy surgery at University of Health Sciences Türkiye, Etlik Zübeyde Hanım Gynecology and Pediatrics Training and Research Hospital, between January 2023 and September 2024, and whose data were fully accessible, were included in the study. After recording the demographic data, pathology data and clinical data of the patients, statistical analysis was performed.

**Results:** Thirty-nine patients were included in the study, and the patients were divided into groups according to the uterine corpus length/cervix length ratio. Those with a ratio of  $<1.5$  were accepted as elongation. No significant difference was observed between the groups in terms of age, gravida and parity ( $p>0.05$ ). No difference was observed between the groups in terms of smoking and presence of additional diseases ( $p>0.05$ ).

**Conclusion:** As a result of our study, no difference was observed in terms of demographic data between patients with and without elongation. Although a study found that being over 65 years of age and having a total vaginal length of over 9.5 cm were risk factors for elongation, the reliability of the study is low. Prospective, large-scale, randomized controlled studies are needed due to the effect of elongation in predicting recurrence, especially in POP cases where a uterus-protective approach will be followed.

**Keywords:** Pelvic organ prolapse, uterine cervical elongation, total vaginal length

**References**

1. Liu YY, Wang CL, Loo ZX, Lin KL, Long CY. Clinical risk factors for uterine cervical elongation among women with pelvic organ prolapse. *Int J Environ Res Public Health*. 2021; 18: 9255.
2. Hsiao SM, Chang TC, Chen CH, Li YI, Shun CT, Lin HH. Risk factors for coexistence of cervical elongation in uterine prolapse. *Eur J Obstet Gynecol Reprod Biol*. 2018; 229: 94-7.



**[OP-025]****A Case of Scar Endometriosis**

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**Introduction:** Scar endometriosis is a type of endometriosis that can occur along the incision line years after cesarean deliveries, which are increasingly common. While its incidence in the literature is not precisely known, it has become a frequent diagnosis in outpatient follow-ups. It may present as a palpable mass at the old incision site, correlated pain, and enlargement during menstrual periods. Surface ultrasonography is useful for diagnosis. Definitive diagnosis is made through surgical excision and pathological examination of the mass. We aim to share the case and management of our patient with scar endometriosis following cesarean delivery.

**Materials and Methods:** A 38-year-old female patient (gravida 8, parity 6, abortion 2, 4 vaginal deliveries, 2 cesarean sections) presented with complaints of abdominal pain and a palpable mass at the old cesarean incision site for 1.5 years. Her last cesarean section was 2.5 years ago. She had no additional illnesses, smoking history, or allergies. She was under hematology follow-up due to isolated WBC reduction and was using filgrastim (granulocyte colony-stimulating factor). She had previously consulted gynecology and general surgery departments in our hospital and external centers but had not received a diagnosis or treatment. There was no family history of endometriosis or other significant findings.

**Results:** Transvaginal ultrasonography revealed an endometrial thickness of 5 mm with no bilateral adnexal pathology. On abdominal examination, a solid mass approximately 3-4 cm was detected at the left corner of the old cesarean incision line. The patient reported restrictive pain but did not observe swelling or pain exacerbation during menstruation. Superficial tissue ultrasonography

of the reported area revealed a heterogeneously structured, lobulated, hypoechoic lesion with minimal vascularization, measuring approximately 22x14 mm in the left lateral suprapubic incision area (endometrioma?). A diagnosis of scar endometriosis was made, and surgery was planned. Initial lab results showed white blood cell (WBC): 3080, hemoglobin: 13.6 g/dL, C-reactive protein: 5, and beta-human chorionic gonadotropin: negative. After preoperative filgrastim injection, WBC increased to 33710. The solid mass was excised under spinal anesthesia using a wide incision, and the patient was discharged the same day. On postoperative day 3, the patient presented with severe headache and was hospitalized with a preliminary diagnosis of postspinal headache. Ultrasonography revealed a 2x7 cm hematoma in the subcutaneous tissue. Medical treatment was provided, and the patient was discharged on postoperative day 5 after symptom resolution and hematoma organization. In the literature, a study involving 28 cases of extraperitoneal endometriosis found no significant differences in routine laboratory results or inflammatory markers.

**Conclusion:** In conclusion, scar endometriosis is an extraperitoneal type of endometriosis that should be considered in patients with swelling at the cesarean incision site. Symptomatic cases should be managed with wide excision.

**Keywords:** Excision, cesarean section, scar endometriosis

**References**

1. Üstüner I, Üstüner E, Atman ED, et al. Anterior abdominal Wall scar endometriosis: Case series and review of imaging modalities. *Turk J Obstet Gynecol.* 2014; 11: 71-7.
2. Karataş S, Pulatoğlu Ç, Kılıç Aİ, et al. Scar endometriosis after Cesarean section: a case report. *Med Bull Sisli Etfal Hosp.* 2017; 51: 334-7.
3. Gülücü S, Gümüşburun N. The role of inflammatory markers in the diagnosis of extraperitoneal endometriosis. *J Exp Clin Med.* 2022; 39: 1004-7.

## [OP-026]

**A Complication of Periurethral Bulking Agents**

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**Aim:** Periurethral fillers have recently taken their place in non-surgical treatments for stress urinary incontinence. Its content is a bulking agent indicated for the treatment of adults with stress urinary incontinence (SUI).<sup>1</sup> This substance is a sterile, highly viscous gel composed of dextranomer microspheres (50 mg/mL) in a carrier gel composed of non-animal stabilized Hyaluronic acid (17 mg/mL), which forms a biocompatible and biodegradable implant. It is approximately 130 microns. The stabilized hyaluronic acid acts primarily as a carrier and leaves the dDxtranomer microspheres at the implant site.<sup>2</sup> The injection is contained in a disposable syringe. The syringe is equipped with a tip cap, plunger and plunger rod. The syringe is terminally sterilized. The injection is injected submucosally into the bladder near the ureteral opening. By creating increased tissue volume with its injection, it provides coaptation of the distal ureter during bladder filling and contraction, and the dextranomer microspheres are gradually surrounded by the host connective tissue. We will tell you about a complication that developed in a patient who underwent periurethral injection due to stress urinary incontinence.

**Case:** A 35-year-old gravida 5, parity 5 patient with normal delivery underwent transobturator tape operation (TOT) due to stress urinary incontinence. One month after TOT operation, the patient still had stress urinary incontinence and had almost the same incontinence as before the operation, and her vaginal examination was normal. There was no mesh erosion. The patient underwent periurethral injection. Injections were made submucosally in the periurethral region at 12-3-6 and 9 o'clock.

**Discussion:** Although the patient's urinary incontinence disappeared after the procedure, she started to complain of difficulty urinating, little urination and painful urination. Post-voiding residual urine was 30 mL on ultrasound, but the patient described throbbing urination every time she urinated. It was decided to perform cystoscopy on the patient who did not have hematuria. The urethra and bladder wall were intact during cystoscopy. No mesh was found. A yellow dirty ball-like image was visible on the right corner of the bladder neck. A urologist was invited to the case. It was understood that the ball-like image was compatible with a stone, but when the stone was broken, crystallized structures were seen inside. It was interpreted that the old stone and the filling leaking from the submucosal area had probably merged and collapsed. The area was completely cleaned. After the procedure, the patient could hold her urine and urinate comfortably.

**Conclusion:** Periurethral fillings/bulking agents are a non-surgical treatment method for stress urinary incontinence, and cystoscopy should be performed in patients who have painful urination after the procedure. Rarely, the filling material can leak into the bladder from the submucosal area and form a precipitate.

**Keywords:** Periurethral injection, hyaluronic acid, stress urinary incontinence, cystoscopy

**References**

1. Mamut A, Carlson KV. Periurethral bulking agents for female stress urinary incontinence in Canada. *Can Urol Assoc J.* 2017; 11(6Suppl2): S152-4.
2. Sokol ER, Karram MM, Dmochowski RR. Efficacy and safety of polyacrylamide hydrogel for the treatment of female stress incontinence: A randomized, prospective, multicentre North American study. *J Urol.* 2014; 192: 843-9.

## [OP-027]

**The Effect of Bladder Training with Mobile Application on Quality of Life and Sexual Satisfaction in Women with Overactive Bladder**

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**Introduction:** Overactive bladder is a clinical diagnosis defined by the International Continence Society as urinary urgency, usually accompanied by frequency and nocturia, with or without urgent incontinence in the absence of urinary tract infection or other obvious pathological conditions. Studies in the literature have reported that overactive bladder affects the quality of life and sexual satisfaction of women diagnosed with overactive bladder. It is thought that the follow-up and continuity of the trainings given to women to reduce their symptoms will positively affect their quality of life and sexual satisfaction levels. Therefore, this study was planned to determine the effect of bladder education given with a mobile application on quality of life and sexual satisfaction levels in women with overactive bladder.

**Materials and Methods:** This randomized controlled experimental design study started in January 2023 and continues in the urogynecology clinic of a university hospital. G\*Power power analysis was used to determine the sample size and simple randomization was used to select the groups. A total of 100 women diagnosed with overactive bladder were studied, 50 in the mobile application group (MUG) and 50 in the control group (CG). Bladder training was provided to MUG women via mobile application and follow-up was provided. Data were collected with data collection form, follow-up form, mobile application usage scales, quality of life scale and sexual satisfaction scale. Clinical trials: NCT05792956.

**Results:** Preliminary findings of this randomized controlled experimental study are presented. A significant improvement was observed in the quality of life and sexual satisfaction levels of women who received bladder education via mobile application compared to the CG ( $p < 0.05$ ). In addition, the ease of use of the mobile application and patient satisfaction were evaluated, and it was observed that the application was effectively used by the patients. These findings suggest that bladder education provided with a mobile application in the treatment of overactive bladder has positive effects on quality of life and sexual satisfaction. In this study, the mobile application group achieved higher quality of life and sexual satisfaction scores compared to the control group. In addition, the use of the application yielded positive results in terms of patient satisfaction.

**Conclusion:** These results suggest that digital health applications may be an effective alternative in the treatment of OAB and may contribute to the bladder education process.

**Keywords:** Overactive bladder, bladder education, mobile application, quality of life

**References**

1. Farao J, Malila B, Conrad N, Mutsvangwa T, Rangaka MX, Douglas TS. A user-centred design framework for mHealth. *PLoS One.* 2020; 15: e0237910.
2. Olagundoye O, Gibson W, Wagg A. A protocol for the co-creation and usability/acceptability testing of an evidence-based, patient-centred intervention for self-management of urinary incontinence in older men. *PLoS One.* 2024; 19: e0306080.

## [OP-028]

## V-Notes Adnexal Surgery - V-Notes Salpingectomy

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**Aim:** Vaginal natural orifice transluminal endoscopic surgery (V-NOTES) was first employed in 2007 for cholecystectomy (Zorren R. Surg Innov 2007) and later for hysterectomy in 2012 (Su H. Taiwan J Obstet Gynecol 2012). This surgical technique combines vaginal and laparoscopic surgery by entering the abdominal cavity through the natural vaginal orifice, utilizing specialized port systems and laparoscopic instruments (Figure 1). In our clinical practice, we prefer to perform V-NOTES salpingectomy in selected cases, particularly in multiparous patients without prior surgical history, who require surgery due to posterior compartment defects, and who request concurrent genital aesthetic procedures or tubal ligation. For patients requesting tubal ligation, we perform partial salpingectomy with fimbriectomy to both reduce the risk of potential ovarian malignancies and enhance the fertility-preserving aspect of the surgery.

**Case:** Our patient was a 33-year-old woman, G3P3Y3, with three vaginal birth and no history of surgery or comorbidities. She was not on any medications. Ultrasound imaging revealed a homogeneous myometrium without adnexal pathology. The patient was scheduled for RVF-USL plication + labiaplasty + clitoroplasty due to posterior compartment defect. In addition, V-NOTES salpingectomy was planned as part of her surgical procedures, given her request for bilateral tubal ligation (BTL). When comparing the procedure step-by-step with conventional laparoscopy, the preoperative preparation is entirely the same. However, the abdominal entry technique is distinctly different. In conventional laparoscopy, trocars are placed through incisions made directly in the umbilicus and other appropriate locations. In contrast, for V-NOTES surgery, particularly when performing adnexal surgery, posterior colpotomy is done by making an incision in the posterior cervix. During posterior colpotomy, the upper lip of the cervix is grasped with a tenaculum, avoiding any pulling motion. The cervix is gently manipulated up and down to identify the reflection point of the posterior cervical Douglas boundary. A transverse incision of approximately 3-3.5 cm is made at the cervix-Douglas junction, penetrating the peritoneum to access the abdominal cavity. A scalpel, scissors, or cut cautery may be used for the incision. After entering the abdomen, various systems can be utilized for trocar placement, including closed cap systems consisting of a camera sleeve and port system (V-port system) or devices like a GelPOINT system and retractors that assist in positioning the camera sleeve. In our case, we used a V-port closed cap system (Figure 2). Before inserting the trocar, the camera sleeve was placed through the posterior colpotomy incision, followed by positioning the port cap system over the sleeve (Figure 3). Carbon dioxide insufflation is used to inflate the abdominal cavity to a pressure of 12-15 mmHg, creating space between intra-abdominal organs. A 30-degree angled camera is inserted through an appropriate port to visualize the abdominal cavity. Using a 30-degree camera facilitates surgical procedures as the abdominal cavity is visualized from a posterior angle through a narrow window.

**Discussion:** The surgical techniques and instruments used after accessing the abdomen are identical to those employed in conventional laparoscopy. V-NOTES surgery, particularly in selected patient groups, reduces postoperative pain, promotes faster recovery, and provides superior cosmetic outcomes.

**Conclusion:** By performing V-NOTES surgery in carefully selected patient groups, it is possible to maximize patient and surgeon satisfaction without increasing complication rates.

**Keywords:** Gynecology, salpingectomy, V-NOTES

## References

1. Lowenstein L, Matanes E, Weiner Z, Baekelandt J. Robotic transvaginal natural orifice transluminal endoscopic surgery for bilateral salpingo oophorectomy. *Eur J Obstet Gynecol Reprod Biol X*. 2020; 7: 100113.
2. Ahn KH, Song JY, Kim SH, Lee KW, Kim T. Transvaginal single-port natural orifice transluminal endoscopic surgery for benign uterine adnexal pathologies. *J Minim Invasive Gynecol*. 2012; 19: 631-5.
3. Baekelandt J, De Mulder PA, Le Roy I, et al. Adnexectomy by vaginal natural orifice transluminal endoscopic surgery versus laparoscopy: results of a first randomised controlled trial (NOTABLE trial). *BJOG*. 2021; 128: 1782-91.
4. Baekelandt JF, De Mulder PA, Le Roy I, et al. Hysterectomy by transvaginal natural orifice transluminal endoscopic surgery versus laparoscopy as a day-care procedure: a randomised controlled trial. *BJOG*. 2019; 126: 105-13.

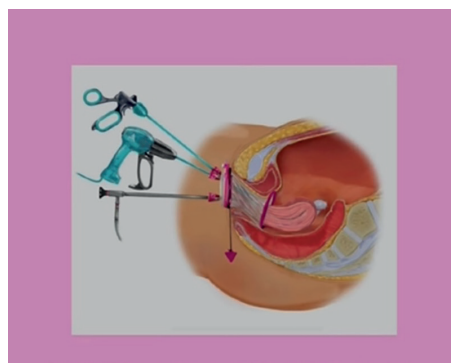


Figure 1. Schematic representation



Figure 2. V-port closed cap system



Figure 3. The camera sleeve was placed through the posterior colpotomy incision, followed by positioning the port cap system over the sleeve

**[OP-029]****Bilateral Serous Macular Detachment in A Case of Severe Preeclampsia: A Case Report**Recep Taha Ağaoğlu<sup>1</sup>, Dicle Mutel Gürer<sup>2</sup><sup>1</sup>Ankara Etlik City Hospital, Clinic of Obstetrics and Gynecology, Division of Perinatology, Ankara, Türkiye<sup>2</sup>Ankara Etlik City Hospital, Clinic of Obstetrics and Gynecology, Ankara, Türkiye

**Aim:** Preeclampsia is a multisystemic disorder seen after the 20<sup>th</sup> week of pregnancy or postpartum and is characterized by new-onset hypertension, proteinuria or multi-organ dysfunction. Ocular complications associated with preeclampsia arise from impaired retinal and choroidal circulation and can lead to visual disturbances such as retinopathy, cotton-wool spots, retinal hemorrhage, edema and rarely serous macular detachment. Although it is seen rarely, serous macular detachment is a significant complication that can cause critical vision loss. This case report discusses a 25-year-old pregnant female patient who developed bilateral serous macular detachment at 33 weeks of gestation due to severe preeclampsia and consequently underwent cesarean delivery.

**Case:** The patient initially presented with new-onset hypertension. During her follow-up, the patient had uncontrollably high blood pressure together with complaints of severe headaches and blurred vision, despite antihypertensive treatment. Ophthalmological examination revealed micropsia (perceiving objects as smaller than they are) and a reduction in bilateral visual acuity. Diagnostic imaging findings confirmed the diagnosis of bilateral serous macular detachment. Postpartum antihypertensive treatment was successful in controlling the patient's blood pressure, and concomitantly there was gradual improvement in the ocular complaints. The patient's vision disturbances gradually resolved during the postoperative period, and by approximately five days after delivery, vision had completely returned to normal. However, the patient reported that her blurred vision persisted even after one month postpartum.

**Conclusion:** Although seen rarely, ocular complications associated with preeclampsia are substantial and can lead to permanent vision loss. For example, a rare complication such as bilateral serous macular detachment can permanently and gravely affect visual function in preeclampsia patients. As seen in this case, early diagnosis and appropriate treatment can lead to the resolution of ocular complications and preservation of vision. A multidisciplinary approach, involving obstetricians, ophthalmologists and other healthcare professionals, is essential in the management of ocular complications related to preeclampsia. Ophthalmological evaluation should be performed as early as possible in addition to antihypertensive treatment, and patients should be closely monitored. However, there is limited data on the long-term outcomes of ocular complications associated with preeclampsia. Therefore, the possibility of permanent ocular pathology should be considered, and long-term follow-up is essential. Further studies are required to better understand the ocular effects of preeclampsia and to improve the management of these complications. In conclusion, the development of clinical guidelines and further research for the prevention and management of ocular complications related to preeclampsia is important to enhance treatment outcomes.

**Keywords:** Preeclampsia, hypertension, serous macular detachment, pregnancy, ocular complication

**References**

1. Gestational Hypertension and Preeclampsia: ACOG Practice Bulletin, Number 222. *Obstet Gynecol.* 2020; 135: e237-60.
2. Bosco JAS. Spontaneous nontraumatic retinal detachment in pregnancy. *American Journal of Obstetrics & Gynecology.* 1961; 82: 208-12.
3. Jaffe G, Schatz H. Ocular manifestations of preeclampsia. *Am J Ophthalmol.* 1987; 103: 309-15.
4. Schultz KL, Birnbaum AD, Goldstein DA. Ocular disease in pregnancy. *Curr Opin Ophthalmol.* 2005; 16: 308-14.
5. Auger N, Fraser WD, Paradis G, Healy-Profítós J, Hsieh A, Rhéaume MA. Preeclampsia and long-term risk of maternal retinal disorders. *Obstet Gynecol.* 2017; 129: 42-9.
6. Tso MO, Jampol LM. Pathophysiology of hypertensive retinopathy. *Ophthalmology.* 1982; 89: 1132-45.
7. He X, Ji Y, Yu M, Tong Y. Chorioretinal Alterations Induced by Preeclampsia. *J Ophthalmol.* 2021; 2021: 8847001.

**[OP-030]****Sphenopalatine Ganglion Block for Postdural Puncture Headache: A Case Report**Dilara Sankaya Kurt<sup>1</sup>, Mustafa Hacıömeroğlu<sup>2</sup><sup>1</sup>Ankara Etlik City Hospital, Clinic of Obstetrics and Gynecology, Ankara, Türkiye<sup>2</sup>Van Ercis Şehit Rıdvan Çevik State Hospital, Clinic of Anesthesiology and Reanimation, Van, Türkiye

**Aim:** Although spinal anesthesia is a safe technique widely used in many surgical procedures, it carries the risk of complications such as postdural puncture headache (PDPH). The reported incidence of PDPH ranges from 10% to 40% depending on age, gender and needle size. The pathophysiology of PDPH is based on a decrease in intracranial pressure as a result of leakage in the dura mater.<sup>1</sup> PDPH is more common in young patients and women. Traditional treatment modalities include fluid therapy, analgesics and epidural blood patch procedures. However, symptoms may persist despite these interventions.<sup>2</sup>

**Case:** A 30-year-old woman was admitted to the obstetrics and gynecology clinic for colpography anterior-posterior and perinoplasty operation. After routine monitoring of the patient, spinal anesthesia was performed with a 25G spinal needle in the L4-5 range. She was discharged from the ward on the first postoperative day. On the third postoperative day, she was admitted to the gynecology and obstetrics service with complaints of headache. The patient was consulted to anesthesiology and reanimation clinic with a prediagnosis of post spinal headache. It was learned that the patient's headache was all over the head, throbbing in character, accompanied by nausea and photophonophobia. Magnetic resonance venography imaging was performed to rule out sinus vein thrombosis and left transverse and sigmoid sinuses were hypoplastic. No pathology was found on neurologic examination

and the patient was diagnosed as PDPH. Hydration and caffeine containing non-steroidal anti-inflammatory drugs were started. Bilateral intranasal sphenopalatine ganglion block was applied to the patient whose headache regressed but did not go away after she refused epidural blood patch. Pain status was checked at 30<sup>th</sup> minute, 1<sup>st</sup> hour, 2<sup>nd</sup> hour and 6<sup>th</sup> hour. The pain was dramatically relieved 30 minutes after the bilateral block and the patient was discharged with analgesic treatment at the 6<sup>th</sup> hour after the procedure.

**Discussion:** In cases resistant to traditional treatment methods or when epidural blood patches are contraindicated, alternative methods are needed.<sup>3</sup> Sphenopalatine ganglion block (SPGB) is one of these treatment methods. The sphenopalatine ganglion plays an important role in the modulation of headache and facial pain due to its close relationship with the trigeminal nerve. The block is thought to relieve headache by reducing the stimulation of parasympathetic and sympathetic nerves.

**Conclusion:** Many studies in the literature have reported that SPGB is effective in the treatment of PDPH.<sup>3-5</sup>

**Keywords:** Post-dural puncture headache, sphenopalatine ganglion block

**References**

1. Takmaz SA, Karaoğlan M, Baltacı B, Bektaş M, Başar H. Transnasal sphenopalatine ganglion block for management of postdural puncture headache in non-obstetric patients. *J Nippon Med Sch.* 2021; 88: 291-5.
2. Gayathri GA, Karthik K, Saravanan R, Meshach MD, Pushparani A. A randomized control study to assess the efficacy of the sphenopalatine ganglion block in patients with post dural puncture headache. *Saudi J Anaesth.* 2022; 16: 401-5.
3. Lo CY, Le S, Kim E. Sphenopalatine ganglion block for postdural puncture headaches in a thrombocytopenic adolescent young adult: A case report. *J Pediatr Hematol Oncol.* 2022; 44: e299-301.
4. Kent S, Mehaffey G. Transnasal sphenopalatine ganglion block for the treatment of postdural puncture headache in obstetric patients. *J Clin Anesth.* 2016; 34: 194-6.
5. Murphy CA, McBride D, Sharma S. Sphenopalatine Ganglion Block for Postdural Puncture Headache. *Pain Med.* 2020; 21: 2615-6.

## [OP-031]

## Management of a TVT Case Complicated with Haematoma and Mesh Erosion

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**Aim:** The patient, 47 years old, gravida 2, parity 2, applied with complaints of constipation, abnormal uterine bleeding and stress type urinary incontinence. In our examination, we detected a type 2-5, 6\*5 cm myoma in the corpus posterior, the endometrium was regular, hypoechoic intrauterine device in normal localization in the cavity, the ovaries were normal. The Q-tip test was positive and the stress test was also positive.

**Case:** Total abdominal hysterectomy, bilateral salpingectomy and tension-free vaginal tape (TVT) operation was performed in the same session. During the TVT operation, we realized that the mesh did not enter from the area we dissected on the right side, but from the vaginal mucosa, passing through the retropubic area and reaching the suprapubic area, so we pulled back the mesh on the right side, re-entered from the area we dissected, passed through the retropubic area and advanced to the suprapubic area and placed the mesh. We terminated the operation when we did not see anything unusual in the cystoscopy we performed. On the 8<sup>th</sup> postoperative day, she applied with complaints of fever and fatigue. We detected a 10 cm pelvic hematoma in the ultrasonography. Since a 10 cm hematoma was observed on the right side of the bladder in the tomography and there was no response to antibiotics, there was even progression on the infection markers, we decided to have a laparotomy. In the laparotomy we performed, there was no active bleeding, but an organized hematoma and abscess appearance. We drained the abscess and hematoma and ended the operation. The abscess culture yielded ESBL *E. coli* and antibiotherapy started (Figure 1, 2).

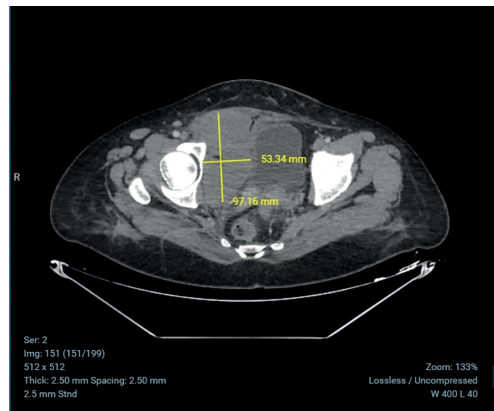
**Discussion:** In the 10<sup>th</sup> month postoperatively, she applied with complaints of pain and palpable hardness experienced by her partner during intercourse. We detected mesh erosion in our examination. We performed a partial mesh excision operation. In the postoperative period, we recommended estrogen-containing cream for the patient to use during discharge.

**Conclusion:** We did not encounter any problems in our patient, who has been using estrogen cream for 6 months and whom we have been following up, and she has a healthy sexual life and does not have urinary incontinence.

**Keywords:** Stress Incontinence, TVT, hysterectomy, mesh erosion

### References

1. Vilos GA, Allaire C, Laberge PY, Leyland N, Special contributors. The management of uterine leiomyomas. *J Obstet Gynaecol Can.* 2015; 37: 157-78.
2. Rackley RR, Abdelmalak JB, Tchetchen MB, Madjar S, Jones S, Noble M. Tension-free vaginal tape and percutaneous vaginal tape sling procedures. *Tech Urol.* 2001; 7: 90-100.
3. Weidner AC, Wu JM, Kawasaki A, Myers ER. Computer modeling informs study design: vaginal estrogen to prevent mesh erosion after different routes of prolapse surgery. *Int Urogynecol J.* 2013; 24: 441-5.



**Figure 1.** Haematoma located upper right side of the bladder, one week after the TVT operation  
TVT: Tension-free vaginal tape



**Figure 2.** Mesh erosion seen before partial mesh excision operation

[OP-032]

## A Bibliometric Analysis of V-NOTES Surgery Between 2012 and 2024

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**Introduction:** Gynecological surgery is continuously evolving to improve the quality of care, enhance patient safety, and increase patient satisfaction. With the development of minimally invasive surgery, natural orifice transluminal endoscopic surgery (NOTES) has emerged. In NOTES, the natural orifices of the human body are used to access the abdominal cavity for surgery, thereby avoiding abdominal wall incisions. This technique, which combines endoscopy with vaginal access, offers several advantages, such as a short operation time, brief hospital stay, minimal pain, and the absence of abdominal scarring. vaginal-NOTES (VNOTES) offers similar surgical outcomes to laparoscopy while providing superior cosmetic results. The aim of this study is to systematically summarize the existing literature on V-NOTES through a bibliometric analysis to facilitate the identification of potential future research directions and to highlight trends and gaps in the field.

**Materials and Methods:** The article search was conducted on October 8, 2024, in the Web of Science Core Collection (WoSCC) database. Bibliometric data on various types of publications between 2012 and 2024 were retrieved using the keywords V-NOTES and women. VOSviewer was used for knowledge mapping.

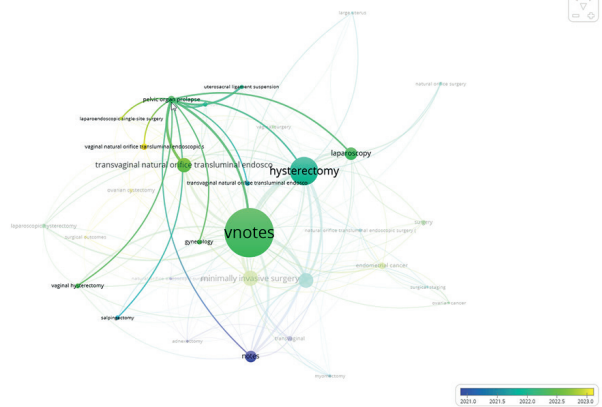
**Results:** A total of 258 publications were identified. The most prolific years were 2023 (65 publications), 2024 (57 publications), and 2022 (52 publications). The publication types were predominantly 178 original articles, 30 editorial materials, 29 meeting abstracts, 12 review articles, 10 early access articles, and 9 letters. The top three most productive countries were China, Belgium, and the United States. Nine of the 258 studies were conducted in the field of urogynecology. This bibliometric analysis provides quantitative data on the use of the V-NOTES technique in gynecology. While highlighting the key strengths in the field of V-NOTES surgery, it will assist academics in evaluating the quality of the literature through bibliometric practices. Research on the V-NOTES has expanded significantly over the past five years. The presence of 26 publications by 4 Turkish authors among the top 25 most productive authors and Türkiye ranking 4<sup>th</sup> among the most productive countries. The fact that only one of the 9 publications in the field of urogynecology is from Türkiye should serve as an incentive to promote the broader adoption of the V-NOTES technique in urogynecology (Table 1, 2).

**Conclusion:** This bibliometric study demonstrates that the depth and breadth of research on V-NOTES surgery have rapidly expanded in the past five years, and that laparoscopic surgery has been widely accepted as an indispensable method in gynecology and urogynecology treatment.

**Keywords:** V-NOTES, urogynecology, laparoscopic surgery, natural orifice

**References**

1. Raquet J, Namèche L, Nisolle M, Closon F. The revival of vaginal surgery in the era of endoscopy: V-NOTES initial experience with a series of 32 patients. *Facts Views Vis Obgyn.* 2023; 15: 69-78.
2. Li GS, Lu M, Peng GL, Zhou Q. A bibliometric analysis on laparoscopic pelvic floor surgery from 1996-2022. *Eur J Obstet Gynecol Reprod Biol.* 2024; 301: 264-70.
3. Kong M, Shi Y, Wang Z, Hao Y, Djurist NR, Li Y. Trends and focal points in pelvic floor reconstruction for pelvic organ prolapse: A bibliometric analysis. *Medicine (Baltimore).* 2024; 103: e38131.



**Figure 1.** Keywords related to the relationship between V-NOTES and urogynecology  
V-NOTES: Vaginal natural orifice transluminal endoscopic surgery

Table 1. Top 10 countries in the field of V-NOTES surgery			
Rank	Countries	Article count	Citation
1	China	55	305
2	Belgium	50	668
3	USA	50	204
4	Türkiye	19	245
5	Australia	16	334
6	Switzerland	16	54
7	France	14	31
8	Israel	11	124
9	Sweden	10	16
10	Brazil	9	28

V-NOTES: Vaginal natural orifice transluminal endoscopic surgery

Table 2. Top 10 authors in the field of V-NOTES surgery			
Rank	Author	Article count	Citation
1	Jan Baeckelandt	33	387
2	Li He	20	66
3	Yong-Hong Lin	18	34
4	Dan Feng	19	245
5	Yannick Hurni	12	44
6	Cihan Kaya	12	178
7	Xin Li	11	25
8	Liu Tianjiao	11	25
9	Lu Huang	11	55
10	Daniela Huber	11	35

V-NOTES: Vaginal natural orifice transluminal endoscopic surgery

## [OP-033]

## The Most Common Urinary Tract Infection Agents in Symptomatic Pregnant Women: Tertiary Centre Experiences

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**Introduction:** Urinary tract infections are the most common bacterial infection in pregnancy. The definition of urinary tract infection (UTI) in pregnancy usually includes symptomatic infections of both the bladder (cystitis) and kidney (pyelonephritis). It also includes asymptomatic bacteriuria, in which bacteria are present in the urine but there are no symptoms. Urinary tract infections in pregnancy are usually transmitted by ascending route and the causative organism is mostly *E. coli* and other Gram-negative bacteria. The aim of our study was to determine the most common bacterial agents grown in urine cultures obtained from symptomatic pregnant women in our clinic.

**Materials and Methods:** In our study, 346 pregnant patients who applied to Ankara Etlik City Hospital, Clinic of Obstetrics and Gynecology between January 2024 and June 2024 were included. Patient records were evaluated retrospectively. Our study is a qualitative epidemiological study.

**Results:** Urine cultures grew in 272 symptomatic pregnant patients. Patients with urine culture growth constituted 78% of all symptomatic patients. The most common agents grown in urine culture were *Escherichia coli* (47.05%/128 patients), *Streptococcus agalactiae* (Strep. group B) (17.64%/48 patients), *Klebsiella pneumoniae* (9.55%/26 patients), *Enterococcus faecalis* (6.25%/17 patients), *Klebsiella* species (3.67%/10 patients), *Staphylococcus epidermidis* (3.30%/9 patients), *Proteus* species (2.20%/6 patients), *Candida albicans* (1.83%/5 patients), *Staphylococcus saprophyticus* (1.47%/4 patients), *Staphylococcus aureus* (1.47%/4 patients), *Streptococcus mitis/oralis* (1.10%/3 patients), *Enterobacter aerogenes* (1.10%/3 patients), *Acinetobacter baumannii* (0.73%/2 patients), *Candida* species (0.73%/2 patients), *Corynebacterium striatum* (0.73%/2 patients), *Enterobacter hormaechei* (0.36%/1 patient), *Pseudomonas aeruginosa* (0.36%/1 patient), *Staphylococcus cohnii* ssp. *urealyticum* (0.36%/1 patient). Urinary tract infections are considered to be one of the most important infections in pregnancy. It is of great importance to screen the mother against these infections during pregnancy and to start appropriate treatment when necessary. However, since many antimicrobial drugs may adversely affect the foetus, the choice of drugs to be used in treatment should

be made carefully. The most common urinary infection agents in pregnant women are *E. coli*, *Staphylococcus saprophyticus*, *Proteus mirabilis*, *Klebsiella pneumoniae*, group B streptococci and rarely *U. urealyticum* and *M. hominis*.

**Conclusion:** In our study, *E. coli*, *Streptococcus agalactiae* and *Klebsiella* were the most common organisms and this was similar to the literature.

**Keywords:** Urinary system infections, pregnancy

### References

1. Glaser AP, Schaeffer AJ. Urinary tract infection and bacteriuria in pregnancy. *Urol Clin North Am.* 2015; 42: 547-60.
2. Macejko AM, Schaeffer AJ. Asymptomatic bacteriuria and symptomatic urinary tract infections during pregnancy. *Urol Clin North Am.* 2007; 34: 35-42.

**Table 1. Bacteria grown in urine culture of symptomatic pregnant women**

Causative bacteria	Number	Percent
<i>Escherichia coli</i>	128	47.05%
<i>Streptococcus agalactiae</i> (Strep. group B)	48	17.64%
<i>Klebsiella pneumoniae</i>	26	9.55%
<i>Enterococcus faecalis</i>	17	6.25%
<i>Klebsiella</i> species	10	3.67%
<i>Staphylococcus epidermidis</i>	9	3.30%
<i>Proteus</i> species	6	2.20%
<i>Candida albicans</i>	5	1.83%
<i>Staphylococcus saprophyticus</i>	4	1.47%
<i>Staphylococcus aureus</i>	4	1.47%
<i>Streptococcus mitis/oralis</i>	3	1.10%
<i>Enterobacter aerogenes</i>	3	1.10%
<i>Corynebacterium striatum</i>	2	0.73%
<i>Candida</i> species	2	0.73%
<i>Acinetobacter baumannii</i>	2	0.73%
<i>Staphylococcus cohnii</i> ssp. <i>urealyticum</i>	1	0.36%
<i>Pseudomonas aeruginosa</i>	1	0.36%
<i>Enterobacter hormaechei</i>	1	0.36%
Total	272	100%



**[OP-034]****A Rare Case of Müllerian Anomaly: Transverse Vaginal Septum**

Burcu Ceren Özdoğan, Özgün Akbaş, Mehmet Ferdi Kinci

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**Introduction:** Transverse vaginal septum represent a rare type of Müllerian anomaly, with an estimated incidence ranging between 1 in 2,100 and 1 in 72,000. This condition arises from the failure of fusion and/or canalization of the urogenital sinus and Müllerian ducts. The septa can be classified as either perforate or imperforate and can vary in thickness and location within the vagina. Imperforate septa typically present during adolescence with obstructed menstruation and hematocolpos, whereas perforate septa often result in normal menstrual cycles but may cause difficulties with intercourse or tampon use.

**Materials and Methods:** The patient is a 31-year-old, married for one month, with no prior history of coitus or comorbidities. She presented to our hospital with complaints of dyspareunia. According to her medical history, she had attempted intercourse previously, but penetration was limited to 1-2 cm and patient could not engage in intercourse due to dyspareunia. She reported no dysmenorrhea, and her menstrual cycles were regular. Suprapubic ultrasonography showed normal internal genital organs.

**Results:** Given the intense pain experienced during the examination, a decision was made to proceed with an examination under anesthesia and

resection of the septum. Vaginal examination revealed a band located approximately 5 mm below the urethra, between the labia minora, at the 7 to 11 o'clock positions. The band was grasped with a clamp, incised, and sutured on both sides. The procedure was completed without any bleeding or complications. The patient was discharged with full recovery after two hours of postoperative observation. The use of vaginal dilators was recommended to aid in healing and to prevent stenosis.

**Conclusion:** Transverse vaginal septum is a rare anomaly of the female genital tract. Although the typical presentations include hematocolpos and dysmenorrhea, dyspareunia may also occur. Surgical intervention is necessary, and the use of vaginal dilators should be recommended to prevent postoperative stenosis. This case underscores that even a small vaginal band can significantly impact a patient's quality of life and highlights the importance of comprehensive medical history and vaginal examination in patients presenting with dyspareunia.

**Keywords:** Vaginal septum, Müllerian anomaly, dyspareunia

**References**

1. El Abbassi I, Bensouda ME, Jalal M, Lamrissi A, Bouhya S. Surgical management of a transverse vaginal septum: About a rare case. *Int J Surg Case Rep.* 2023; 110: 108682.
2. Doğan E, Yavuz O, Altay C, Özmen S. Asymptomatic microperforated transverse vaginal septum presenting with primary infertility: a rare form of mullerian anomaly. *Turk J Obstet Gynecol.* 2019; 16: 140-2.

**[OP-035]****Approach to Early Mesh Erosion Following TOT Procedure**

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**Aim:** Mesh erosion is a rare complication observed after transobturator tape (TOT) procedures. Early-stage mesh erosion repair is challenging due to increased tissue edema and impaired tissue regeneration following surgery. When mesh erosion is localized, it may be treated with vaginal topical estrogen; however, in cases of extensive mesh erosion or infected mesh, excision of the mesh is recommended. This report presents a case of localized mesh excision and trapezoidal repair performed on a patient who developed mesh erosion at the vagina and skin 15 days post-TOT application.

**Case:** A 53-year-old woman, G3P3Y3 (svb), with no additional medical conditions, underwent a TOT procedure for stress urinary incontinence at an external center. On the 15<sup>th</sup> postoperative day, she presented with vaginal mesh erosion. Examination revealed eroded mesh 2 cm beneath the urethra, along with noted grade 3 apical prolapse. Physical examination findings, including urethra, creatinine levels, complete urinalysis, and urine culture results, along with her age, chronic conditions, and ongoing medications, were recorded. Eroded mesh excision, along with simultaneous trapezoidal repair and vesicovaginal fascia and mucosal repair, was performed.

**Discussion:** A 54-year-old female patient presented to our clinic in July 2024 with complaints of pain and swelling in the vagina and perineum. Her history revealed that she had undergone a TOT operation for stress urinary incontinence 15 days prior at an external center, using an adjustable macroporous monofilament polypropylene mesh (Safyre®). She reported the onset of vaginal pain and swelling on the 7<sup>th</sup> postoperative day. Upon examination, a 1 cm diameter endourethral lesion and eroded mesh were observed 2 cm below the urethra. Investigations showed no signs of active infection. In July 2024, the patient underwent total mesh excision, trapezoidal repair, and vaginal mucosal repair. Postoperative recovery showed a resolution of symptoms, with the wound healing normally (Figure 1, 2).

**Conclusion:** The treatment of early-stage mesh erosion is more challenging compared to late-stage interventions, as eroded mesh excision and tissue repair are complicated by postoperative edema and hyperinflammation. In our case of early-stage mesh erosion, we performed simultaneous mesh excision, vesicovaginal fascia, and mucosal repair along with trapezoidal repair. During follow-up, no additional complications were reported, and the patient noted a subjective improvement in her urinary incontinence symptoms (Figure 3).

**Keywords:** TOT, erosion, mesh, apical prolapse, stress urinary incontinence

**References**

1. Ulubay M, Firatligil F, Öztürk M, Kinci M, Fidan U. Perioperative outcomes of female stress urinary incontinence treated with transobturator tape. *Cukurova Med J.* 2017; 42: 670-4.
2. Hong IK, Kim HC, Kim JJ, Kim JY, Lee KW. The rate of mesh erosion after modified transobturator tape (canal transobturator tape) surgery: analysis of 5 years' outcome and influencing factors. *Urol Int.* 2019; 103: 482-7.
3. Das D, Carroll A, Mueller M, et al. Mesh complications after total vs supracervical laparoscopic hysterectomy at time of minimally invasive sacrocolpopexy. *Int Urogynecol J.* 2022; 33: 2507-14.



**Figure 1.** Erosion mesh and apical prolapse



**Figure 2.** Erosion mesh area



**Figure 3.** Excised eroded mesh

[OP-036]

**Comparison of High Risk and Low Risk Pregnant Women in According to Postpartum Depression**

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**Introduction:** Pregnancy, labour and the postpartum period can lead to mental illness in women, especially postpartum depression (PPD) is an important problem. High-risk pregnancies (HRP) are usually characterised by existing health problems (obesity, hypertension, diabetes) or conditions that occur during pregnancy, and these conditions may increase the health risks of the mother and the baby. Our study aims to examine whether postpartum depression is more common in HRP than in low-risk pregnancies (LRP).

**Materials and Methods:** Patients who gave birth in the HRP delivery ward and in the labour ward where LRP were followed up between 1-31 July 2024 at Ankara Etlik City Hospital, Clinic of Obstetrics and Gynecology were included in the study. “Edinburgh postnatal depression scale” score was used for PPD detection. Student’s t-test and chi-square test were used for statistical analysis.

**Results:** The mean age of the patients in the delivery room was 28.26±4.95 years, the mean age of the patients in the HRP was 27.13±4.65 years and there was no significant difference between them ( $p=0.098$ ). There was no significant difference between the number of gravida, parity, abortion and mode of delivery of the patients in the delivery room and HRP (Gravida

$p=0.714$ , parity  $p=0.178$ , abortion  $p=0.736$ , vaginal delivery  $p=0.564$ , Caesarean section  $p=0.379$ ). There was no significant difference between the pregnant women followed up in HRP in terms of depression score according to follow-up diagnosis ( $p=0.137$ ). The Edinburgh scores of the labour ward and the NICU groups were 5.84±5.45 and 7.30±5.04, respectively, and there was no significant difference between them ( $p=0.051$ ). In the delivery room group, the number of healthy patients according to Edinburgh postpartum depression scale was 84 and the number of depressed patients was 16. In the HRP group, the number of healthy patients was 81 and the number of depressed patients was 19. There was no significant difference between the number of depressed patients in the delivery room and HRP groups ( $p=0.710$ ). In our study, no significant difference was found in terms of postpartum depression between the patients who gave birth in HRP and the patients who gave birth in the labour ward where LRP women were followed up. However, the literature suggests that the risk of depression in the postpartum period may increase due to increased prenatal anxiety in pregnant women followed up in HRP.

**Conclusion:** Randomised controlled studies with a larger sample size may shed light on the necessary studies to reduce the risk of PPD in pregnant women followed up in HRP by revealing the increase in risk, if any.

**Keywords:** Postpartum depression, high risk pregnancy, low risk pregnancy, Edinburgh postpartum depression scale

**References**

1. Alshikh Ahmad H, Alkhatib A, Luo J. Prevalence and risk factors of postpartum depression in the Middle East: a systematic review and meta-analysis. BMC Pregnancy Childbirth. 2021; 21: 542.
2. Hutchens BF, Kearney J. Risk factors for postpartum depression: An umbrella review. J Midwifery Womens Health. 2020; 65: 96-108.

**Table 1. Comparison of groups in terms of age and Edinburgh score**

Variable	Mean ± standard deviation (LRP group)	Mean ± standard deviation (HRP group)	t statistics	p-value
Age	28.26±4.95	27.13±4.65	t:1.66	0.098
Edinburg score	5.84±5.45	7.30±5.04	t:-1.97	0.051

LRP: Low-risk pregnancies; HRP: High-risk pregnancies

**Table 2. Distribution of depression between groups**

Variable	Mean ± standard deviation (LRP group)	Mean ± standard deviation (HRP group)	chi-square	p-value
Healthy	84	81	0,14	0.710
Depression	16	19	0.14	0.710

LRP: Low-risk pregnancies; HRP: High-risk pregnancies

[OP-037]

### Evaluation of Uterine Leiomyoma Cases with Plateletcrit and Systemic Immune Inflammation Index

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**Introduction:** Uterine leiomyomas (UL), the most common tumor of the female genital system, are associated with abnormal uterine bleeding, pelvic pain, infertility, abortus, and hysterectomy. Despite its high incidence, its etiopathogenesis is not clearly defined. Oxidative stress and inflammatory microenvironment, obesity, and hyperlipidemia are among the factors thought to play a role. Based on this, we aimed to examine the values of plateletcrit (Pct) and systemic immune-inflammatory index (SII), which are inflammatory complete blood count markers, in patients with UL diagnosis.

**Materials and Methods:** The retrospective study was conducted with patients diagnosed with UL who underwent surgery at University of Health Sciences Türkiye, Etlik Zübeyde Hanım Obstetrics and Gynecology Training and Research Hospital between July and May 2024. Forty-six women were included in the UL group and 59 women were included in the control group. Preoperative laboratory, socio-demographic, and clinical characteristics were obtained from hospital records. The SII value was obtained by dividing the neutrophil count by the thrombocyte count by the lymphocyte count. Parametric data were shown as mean ± standard deviation, and nonparametric data were shown as median (25-75 percentile). The independent sample t-test and Mann-Whitney U test were used to compare the groups. P-values below 0.05 were considered significant.

**Results:** The mean age of the case group was 44.7, and the body-mass index was 27.2±2.1 kg/m<sup>2</sup>. White blood cell, neutrophil, and lymphocyte counts were significantly lower in the case group. Thrombocyte counts and hemoglobin values were similar. SII was significantly lower in the case group (622±227 10<sup>9</sup>/L vs 817±280 10<sup>9</sup>/L, p<0.001). Pct value was statistically significantly higher in the case group (0.29±0.06 % vs. 0.25±0.07 %, p=0.002).

When UL cases were compared according to their numbers and sizes, it was seen that they were similar in terms of clinical, demographic, and laboratory findings (p>0.05) (Table 1, 2). The present study showed that Pct values were higher in the UL patient group, but there was no change according to UL size or number. SII values were also found to be decreased. These different results may be explained by hormonal mechanisms affecting angiogenesis or lipid metabolism.

**Conclusion:** Studies with more participants and including other factors may be useful in clinical practice.

**Keywords:** Uterine leiomyoma, systemic immune-inflammatory index, plateletcrit

**References**

- Giuliani E, As-Sanie S, Marsh EE. Epidemiology and management of uterine fibroids. Int J Gynaecol Obstet. 2020; 149: 3-9.
- Nøst TH, Alcalá K, Urbarova I, et al. Systemic inflammation markers and cancer incidence in the UK Biobank. Eur J Epidemiol. 2021; 36: 841-8.

**Table 1. Comparison of socio-demographic and laboratory data of case and control groups**

	Case (n=46)	Control (n=59)	p-value
Age (years)	44.7±6.3	41.4±7.1	0.016*
BMI (kg/m <sup>2</sup> )	27.2±2.1	28.2±2.9	0.625*
Gravidity (n)	3±2	3±1	0.570*
Parity (n)	2±1	1±1	<0.001*
Wbc (x10 <sup>9</sup> /L)	6.5±1.8	8.5±0.9	<0.001*
Neutrophil (x10 <sup>9</sup> /L)	4.1±1.2	6.3±1.1	<0.001*
Lymphocyte (x10 <sup>9</sup> /L)	1.9±0.5	2.2±0.5	0.001*
Hb (g/dL)	11.9±1.6	12.1±1.1	0.605*
Thrombocyte (x10 <sup>9</sup> /L)	280±67	284±86	0.773*
SII (x10 <sup>9</sup> /L)	622±227	817±280	<0.001*
Pct (%)	0.29±0.06	0.25±0.07	0.002*

\*Comparison between groups was made with independent t-test. Values are given as mean ± standard deviation. BMI: Body-mass index; Wbc: White blood cell; SII: Systemic immune-inflammatory index; Pct: Plateletcrit

**Table 2. Comparison of socio-demographic and laboratory parameters according to the number of uterine leiomyomas**

	Single (n=26)	Multiple (n=20)	p-value
Age (years)	44 (40-48)	46 (42-49)	0.357**
BMI (kg/m <sup>2</sup> )	27.5 (26-30.8)	26.6 (24.7-30.9)	0.492**
Gravidity (n)	3 (2-3)	2 (1-4)	0.554**
Parity (n)	2 (1-3)	2 (1-3)	0.791**
Wbc (x10 <sup>9</sup> /L)	6.7 (5.4-7.3)	7.1 (5.4-8.1)	0.542**
Neutrophil (x10 <sup>9</sup> /L)	4.2 (3.2-4.8)	4.3 (3.3-5.2)	0.714**
Lymphocyte (x10 <sup>9</sup> /L)	1.8 (1.4-2.2)	2 (1.6-2.3)	0.369**
Hb (g/dL)	11.8 (11.1-12.9)	12.2 (10.7-13.9)	0.816**
Thrombocyte (x10 <sup>9</sup> /L)	278 (232-299)	285 (238-343)	0.381**
SII (x10 <sup>9</sup> /L)	610 (531-686)	648 (433-486)	0.894**
Pct (%)	0.28 (0.25-0.31)	0.29 (0.26-0.32)	0.616**

\*\* Comparison between groups was performed by independent t-test. Values are given as mean ± standard deviation. BMI: Body-mass index; Wbc: White blood cell; SII: Systemic immune-inflammatory index; Pct: Plateletcrit

**[OP-038]****Colon Cancer Presenting with Ileus in Pregnancy:  
A Case Report**Neslihan Bezirganoğlu Altuntaş<sup>1</sup>, Kenan Ziyadeoğlu<sup>1</sup>, Sema Baki Yıldırım<sup>2</sup><sup>1</sup>University of Health Sciences Türkiye, Trabzon Kanuni Training and Research Hospital, Clinic of Obstetrics and Gynaecology, Trabzon, Türkiye<sup>2</sup>Giresun University Faculty of Medicine, Department of Obstetrics and Gynaecology, Giresun, Türkiye

**Aim:** Although the incidence of colorectal cancer during pregnancy is quite rare, at approximately 0.002%, its symptoms can overlap with common pregnancy-related complaints such as nausea, vomiting, abdominal pain, and changes in bowel habits. Therefore, many cases of colorectal cancer are missed during pregnancy and are often diagnosed at later stages, where prognosis is poorer. This delay in diagnosis can also increase maternal and fetal mortality and morbidity. This case report presents a patient diagnosed with colorectal cancer during the third trimester of pregnancy, who presented with symptoms of ileus.

**Case:** A 23-year-old patient (gravida 2, parity 1) who was undergoing routine prenatal care, at 34 weeks of gestation, presented to the emergency department with complaints of nausea, vomiting, abdominal distension, and constipation persisting for one month. Laboratory tests revealed minimal elevation of liver enzymes. Physical examination showed abdominal distension and epigastric tenderness. No stool was detected upon digital rectal examination. An abdominal X-ray taken in the upright position revealed widespread air-fluid

levels and no transition to the distal bowel. The patient was consulted by the general surgery team and diagnosed with ileus, leading to symptomatic treatment. On the second day of ileus treatment, the patient spontaneously went into labor and delivered a 2100 g infant vaginally with a 7/9 APGAR score. A post-delivery CT scan showed diffuse asymmetric wall thickening causing luminal narrowing in the ascending colon and hepatic flexure, approximately 8 cm in length. free fluid was observed in the perihepatic, perisplenic, and pelvic areas, consistent with a diagnosis of colorectal cancer. In the postpartum period, the patient was referred to general surgery, where she underwent a right hemicolectomy and terminal ileostomy. The pathology report showed poorly differentiated cohesive carcinoma. The patient is currently receiving chemotherapy and radiation therapy in the oncology department. The newborn was discharged.

**Discussion:** Although colorectal cancer is rare during pregnancy, it can lead to serious complications for both the mother and infant. Clinical suspicion is crucial for diagnosis.

**Conclusion:** For early detection, in addition to a detailed physical examination, imaging techniques (such as MRI, ultrasound-guided biopsy), and other laboratory parameters should be used.

**Keywords:** Pregnancy, colorectal cancer

**References**

1. Iijima T, Nakatsubo R, Shinohara H, et al. A case of colon cancer manifesting as intussusception in pregnancy. *Nihon Shokakibyo Gakkai Zasshi*. 2022; 119: 61-5.
2. Öztaş E, Özler S, Ersoy AÖ, et al. Gebelikte kolon kanseri metastazına bağlı krukentberg tümörü: Olgu sunumu. *Gazi Medical Journal*. 2017; 28: 46.
3. Yüce T, Acar D, Çetindağ E, Atabekoğlu C. Advanced stage colorectal cancer during pregnancy: A case report. *Cukurova Med J*. 2015; 40: 807-10.

**[OP-039]****A Pregnancy with Right Tubo-ovarian Agenesis and Unicornuate Uterus Complicated by Fetal Growth Restriction: A Case Report**

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**Aim:** The prevalence of unicornuate uterus is approximately 1 in 4,000 women. In patients with a unicornuate uterus, about 23.7% are reported to be infertile. Furthermore, researchs showing that it can result in 24.3% first-trimester miscarriage, and in 9.7% second-trimester miscarriage. It was also reported pregnancies in women with unicornuate uterus have a 20.1% incidence of preterm birth, while only 44% can reach full term. Moreover, intrauterine fetal death can occur in 10.5% of cases during the third trimester. In this case, we report a pregnancy in a patient with a right tubo-ovarian agenesis and a unicornuate uterus, complicated by fetal growth restriction.

**Case:** A 33-year-old woman with a history of 8 years of unprotected intercourse experienced a first spontaneous pregnancy. During her obstetric follow-up, at 12 weeks and 5 days of gestation, the measured nuchal translucency (NT) was 2.01, leading to a referral to a perinatologist. The patient's first trimester screening test revealed a low-risk result (<1/10,000). At 23 weeks of gestation, a fetal anomaly scan via ultrasound showed no pathology. However, at the 30<sup>th</sup> week of gestation, fetal growth restriction (AC<1P) was noted. Doppler findings during obstetric follow-up remained within normal limits. A cesarean section was planned at 37 weeks of gestation. During the surgery, exploration revealed a unicornuate uterus, a right-round ligament, and agenesis of the right ovary and fallopian tube (Figure 1). A 2,830 gram neonate was delivered with an APGAR score of 6/9. Prior gynecological and obstetric examinations had not provided additional information regarding the right ovary, right fallopian tube agenesis, or unicornuate uterus. The patient also had a history of right renal agenesis

**Discussion:** Women with unicornuate uterus are known to be at higher risk for obstetric complications, including infertility, spontaneous miscarriage, preterm birth, postpartum hemorrhage, fetal growth restriction, fetal malpresentation, and cesarean delivery. Therefore, it is important to recognize that women with this anomaly are at significant obstetric risk.

**Conclusion:** In cases of clinical suspicion, advanced imaging studies are required to establish a definitive diagnosis. This can enable timely obstetric management and prevention of complications.

**Keywords:** Infertility, Mullerian anomaly, unicornuate uterus

**References**

1. Souvizi B, Jafarzadeh ER. A case of successful pregnancy in a complete bicornuate uterus. *Journal of Midwifery and Reproductive Health*, 2016; 4: 720-2.
2. Reichman D, Laufer MR, Robinson BK. Pregnancy outcomes in unicornuate uteri: a review. *Fertil Steril*. 2009; 91: 1886-94.
3. Raga F, Bauset C, Remohi J, Bonilla-Musoles F, Simón C, Pellicer A. Reproductive impact of congenital Müllerian anomalies. *Hum Reprod*. 1997; 12: 2277-81.



**Figure 1.** Unicornuate uterus with the right round ligament originating from the lower segment

**[OP-040]****The Use of Hypochlorous Acid in the Treatment of Vaginal Mesh Erosion Following Transobturator Tape Application: A Case Report**

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**Aim:** Mesh erosion is a rare complication following transobturator tape (TOT) application. While small mesh erosions can be treated with vaginal topical estrogen, larger erosions or cases with infection require mesh excision. Hypochlorous acid (HOCl) is an oxidant produced endogenously in the body and plays a role in neutrophil activation. It has been demonstrated that it possess rapid bactericidal effects against most pathogens responsible for surgical site infections.

**Case:** In this case report, we present the role of subsequent treatment with HOCl solution in addition to local mesh excision and vaginal mucosa repair in a patient who developed vaginal and cutaneous mesh erosion following TOT application.

**Discussion:** A 51-year-old patient diagnosed with cystocele and uterine prolapse underwent an external TOT procedure. The postoperative course was uneventful, with residual urine volume of 40 cc at discharge. At the two-month postoperative follow-up, suburethral mesh extrusion was detected. Despite vaginal topical estrogen therapy, the patient did not improve and we performed a second surgery, where the eroded mesh was partially excised. Primary suturing was performed. From postoperative day 1, we applied HOCl dressing was twice daily. No signs of incontinence or infection were observed during follow-up.

**Conclusion:** Mesh erosion can be a challenging complication due to fibrosis related to the mesh and procedure, with a risk of vascular injury in some cases. In cases of minimal erosion not resolving with conservative management, partial mesh excision and vaginal suturing can be performed. No allergic reactions to HOCl were observed, and it contributed positively to wound healing.

**Keywords:** Hypochlorous acid, TOT, mesh erosion

**References**

1. Kanar M, Cam N, İpek E, Özdemir HM. The intraoperative use of hypochlorous acid in infected hip arthroplasty revision surgery. *Duzce Med J.* 2023; 25: 189-94.
2. Erden Ö, Erin R, Şahinler A, et al. Stres üriner inkontinans nedeniyle burch ve transobturator tape uygulanan olgularda seksüel fonksiyon ve inkontinans skorun karşılaştırılması. *Türk Kadın Sağlığı ve Neonatoloji Dergisi.* 2021; 3: 93-8.

[OP-041]

**Transvaginal Repair of Isthmocele Detected Following Cesarean Scar Pregnancy in a Patient with a History of Five Previous Cesarean Sections: A Rare Case Report**

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**Aim:** Cesarean section (C/S) is among the most frequently performed surgical procedures on the uterus in women of reproductive age, both worldwide and in our country. When wound healing following a C/S is incomplete, scar tissue forms in the area, and inadequate healing of this scar can result in the development of an isthmocele. In diagnosis, ultrasonography is usually sufficient, while treatment options include the use of a Mirena IUD, hysteroscopic resection, laparoscopic repair, and transvaginal repair. We aimed to highlight that the transvaginal approach can be a reliable, cost-effective option, offering short hospital stays and early postoperative discharge.

**Case:** A retrospective review of medical records was conducted. A 33-year-old female patient, G6P5(C/S)E1, was evaluated for complaints of intermenstrual bleeding and dark black-colored bloody discharge. Fourteen months earlier, she had been admitted for a non-viable 7-week cesarean scar pregnancy. Transvaginal ultrasonography revealed a myometrial thickness of 1.2 mm in the anterior uterine wall, and increased vascularization near the bladder serosa was observed on color Doppler ultrasound. After assessing the patient’s risk, her treatment was determined to be dilation and curettage under laparoscopic guidance. Laparoscopic bilateral salpingectomy and controlled curettage were performed. Due to persistent endometrial thickness (13-14 mm) and fluctuations in serial beta hCG levels (Figure 1), a revision curettage was carried out in the second postoperative month. By postoperative month 4 (day 112), beta hCG levels were negative. However, due to continued intermenstrual spotting and irregular bleeding, the patient was diagnosed with isthmocele, and a Mirena IUD was inserted. Despite the Mirena, her symptoms persisted for 7 months. Transvaginal ultrasonography showed an isthmocele measuring 8x15 mm, with a residual myometrial thickness

of 2 mm. A transvaginal isthmocele repair was performed. The patient was discharged 12 hours postoperatively. On the 7<sup>th</sup> postoperative day, transvaginal ultrasound showed a residual myometrial thickness of 6 mm.

**Discussion:** When selecting a treatment method, residual myometrial thickness, patient age, and desire for future pregnancy should be taken into consideration.

**Conclusion:** Based on studies and our clinical experience, transvaginal repair should be considered the primary option due to its shorter operative time, reduced hospital stay, and cost-effectiveness (Figure 2, 3).

**Keywords:** Isthmocele, transvaginal repair, prior cesarean section, cesarean scar pregnancy

**References**

1. Barba M, Cola A, Passoni P, La Milia L, De Vicari D, Frigerio M. Transvaginal repair of isthmocele after cesarean scar pregnancy. *Int J Gynaecol Obstet.* 2023; 162: 775-6.
2. Dominguez JA, Pacheco LA, Moratalla E, et al. Diagnosis and management of isthmocele (Cesarean scar defect): a SWOT analysis. *Ultrasound Obstet Gynecol.* 2023; 62: 336-44.
3. Candiani M, Ferrari SM, Marotta E, Tandoi I, Ottolina J, Salvatore S. Mini-invasive transvaginal repair of isthmocele: a video case report. *Fertil Steril.* 2019; 111: 828-30.

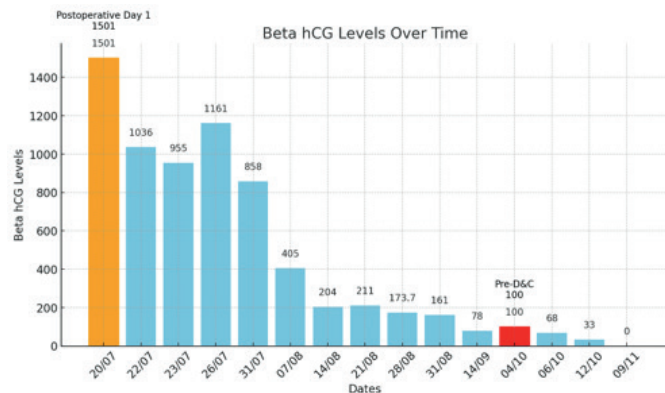


Figure 1. Serial beta-hCG monitoring was performed to track the patient’s response to treatment

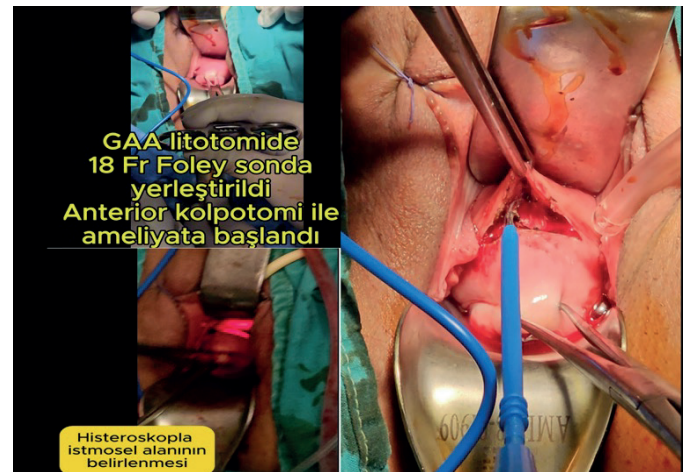


Figure 2. Intraoperative steps

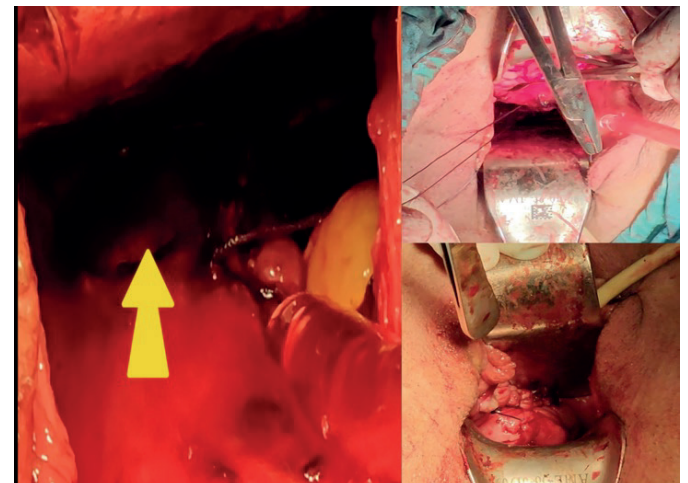


Figure 3. Surgical steps (continued)



## [OP-042]

**Surgical Resection of Transverse Vaginal Septum**

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**Aim:** We present the surgical resection of transverse vaginal septum in a 21-year-old woman diagnosed during infertility work-up (Figure 1, 2). She had a pinhole opening on the septum enabling outflow of menstrual blood slowly and preventing hematocolpos and hematometra.

**Discussion:** Under spinal anesthesia, a double lumen oosite pick-up (OPU) needle was adapted to transvaginal ultrasonography (USG) probe as usual and septum was punctured under USG guidance in order to infuse saline to the upper vagina proximal to the septum. This enabled the septum stay tense and bulge outwards so that we could push the scalpel under the OPU needle without removing the USG probe. Afterwards, USG probe was removed together with OPU needle. 6G Foley was introduced through the opening made with scalpel and its balloon was inflated and used for traction. This opening was enlarged by cutting 1.5 cm with scissors at 3 and 9-o'clock directions. Proximal and distal vaginal mucosal edges were attached with 4 single sutures at 2, 5, 7 and 10 o'clock directions (Figure 3). Optimal vaginal diameter for intercourse was obtained without damaging neighbouring organs such as rectum and vagina.

**Conclusion:** Vaginal mold (no: 2) with antibiotic containing ointment was placed and the operation was completed. Mold size was increased every 5 days until biggest (no: 4). After first normal menstruation vaginal mucosa was healed without stricture. Normal vaginal intercourse was suggested afterwards.

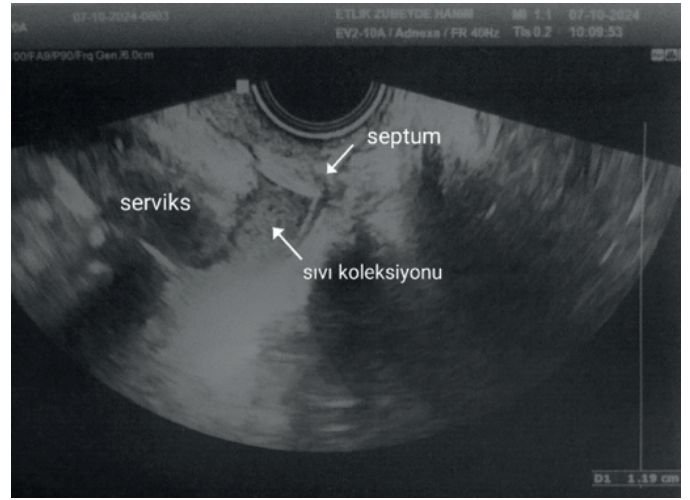
**Keyword:** Transverse vaginal septum

**References**

1. Polasek PM, Erickson LD, Stanhope CR. Transverse vaginal septum associated with tubal atresia. *Mayo Clin Proc.* 1995; 70: 965-8.
2. Brander EPA, Vincent S, McQuillan SK. Transverse vaginal septum resection: Technique, timing, and the utility of dilation. A scoping review of the literature. *J Pediatr Adolesc Gynecol.* 2022; 35: 65-72.



**Figure 1.** Transverse vaginal septum before intervention



**Figure 2.** Transvaginal ultrasound appearance of the transverse vaginal septum and the uterine cervix



**Figure 3.** Enlarging the septal opening under traction of the Foley catheter and sutures approximating proximal and distal vaginal mucosal edges

## [OP-043]

## Surgical Approach to Recurrent Ectopic Pregnancy Cases

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**Aim:** Ectopic pregnancy is a condition in which the blastocyst implants outside the uterine endometrium. The most common site of implantation is the fallopian tubes, accounting for 96% of cases, followed by cervical, interstitial, ovarian, and abdominal pregnancies. Ectopic pregnancy typically presents with abdominal pain and/or vaginal bleeding. Ruptured ectopic pregnancy can result in life-threatening hemorrhage. The most common cause of ectopic pregnancy is the disruption of normal tubal anatomy due to factors such as infections, surgeries, congenital anomalies, or tumors. Anatomical disruption may be accompanied by functional impairment due to damaged ciliary motility. The highest risk is associated with a history of previous ectopic pregnancy or tubal surgery. The preliminary diagnosis of ectopic pregnancy is clinically established by evaluating beta-hCG levels and ultrasound findings together. Medical and surgical methods can be employed in the treatment of ectopic pregnancies. Surgical options include salpingostomy and salpingectomy. In this report, the surgical approach to a recurrent ectopic pregnancy in a patient with a history of ectopic pregnancy is examined.

**Case:** The follow-up and treatment plan for the patient presenting to our clinic through the emergency department was evaluated. Patient characteristics were determined from medical records, laboratory findings, and surgical reports. The case involved a 36-year-old patient with an obstetric history of G4P2NSD2EG1 and a pregnancy of 6 weeks and 2 days based on the last menstrual period. She presented with complaints of vaginal bleeding. The patient had a prior left salpingectomy due to a previous ectopic pregnancy. On physical examination, she was alert, cooperative, and oriented, with a blood pressure of 110/60 mmHg and a pulse rate of 86 bpm. Abdominal examination revealed tenderness, but no rebound or guarding was observed. Vaginal examination showed multiparous cervix with spotting-like bleeding. Transvaginal ultrasonography revealed an anteverted anteflexed uterus with an endometrial thickness of 10 mm. The left ovary appeared normal, while a 22x28 mm ectopic focus was detected in the right adnexal region. A yolk sac and fetal pole were visualized within the ectopic focus. No fluid was observed in the Douglas pouch. Laboratory findings included hemoglobin (Hb) of 10.7 g/dL, hematocrit (Hct) of 33.9%, beta-hCG of 592 IU/mL, and an INR of 1.05. Since the patient did not desire fertility preservation, laparoscopic surgery was performed. During exploration, a 2x3 cm ectopic focus was observed in the right fallopian tube, and a right salpingectomy was performed. Pathology confirmed the diagnosis of tubal ectopic pregnancy.

**Discussion:** Recurrent ectopic pregnancy should be considered, especially in patients with a history of previous ectopic pregnancy.

**Conclusion:** In cases of ectopic pregnancy, where early diagnosis and treatment are life-saving,  $\beta$ -hCG levels should be monitored at 48-hour intervals, and adnexal areas must be evaluated if intrauterine pregnancy is not detected on sonography during pregnancy follow-ups.

**Keywords:** Ectopic pregnancy, ultrasonography, laparoscopy, acute abdomen, pregnancy

### References

1. American College of Obstetricians and Gynecologists' Committee on Practice Bulletins-Gynecology. ACOG Practice Bulletin No. 193: Tubal Ectopic Pregnancy [published correction appears in *Obstet Gynecol.* 2019; 133: 1059.
2. Webster K, Eadon H, Fishburn S, Kumar G, Guideline Committee. Ectopic pregnancy and miscarriage: diagnosis and initial management: summary of updated NICE guidance. *BMJ.* 2019; 367: 16283.

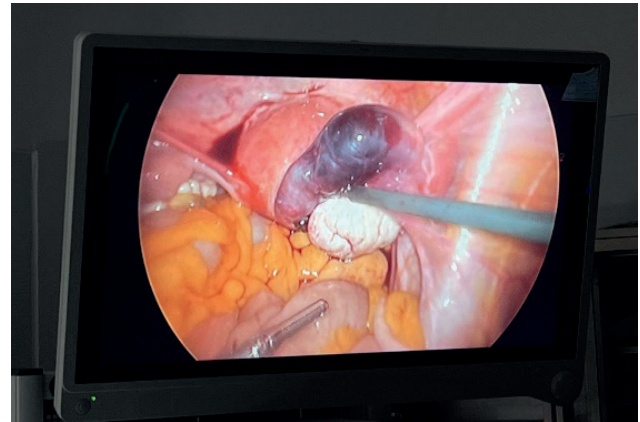


Figure 1. Laparoscopic view of tubal pregnancy



Figure 2. Salpingectomy specimen

## [OP-044]

## Reliability of the Urine Spot Test in Predicting Urinary Tract Infections During Pregnancy: A Cross-sectional Study

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**Introduction:** The aim of this study is to examine whether there is a significant difference between positive urinalysis (Total UA) results and the detection of infections in urine cultures during pregnancy.

**Materials and Methods:** We conducted a retrospective observational study that included 177 patients admitted to our hospital between September 1, 2023, and November 1, 2023, who had a complete urinalysis performed. Based on the total urinalysis (UA) results, patients with leukocytes/bacteria >5, positive leukocyte esterase, and positive nitrites were identified. The patients were then divided into two groups: those whose urine culture results were evaluated and those who were not. The total UA results were compared with the urine culture findings. Additionally, the gestational age of patients with positive urinalysis was recorded to investigate whether there was a relationship between the frequency of urinary tract infections (UTIs) and pregnancy.

**Results:** A total of 177 pregnant patients were included in the study, all of whom had complete UA results. Upon reviewing the UA abnormalities, it was found that 80.2% had elevated leukocyte/bacteria levels, 61% had positive leukocyte esterase, and 25.4% tested positive for nitrites. According to urine culture results, 54.8% of participants did not undergo urine culture, while 45.2% did. Among those with urine cultures, 77.5% showed no bacterial growth, and 22.5% had bacterial growth. Additionally, the mean gestational age of the patients was 25.96±11.57 weeks, and the mean gestational age according to ultrasound measurements was 26.02±11.64 weeks. No significant association was found between gestational age and the incidence of UTIs (Table 1). In our study, no significant correlation was observed between positive total UA results during pregnancy and bacterial growth in urine cultures.

**Conclusion:** Further comprehensive multicenter studies with a larger patient population are needed to better understand the incidence of UTIs in relation to gestational age and to explore additional tests that can be utilized for diagnosing UTIs.

**Keywords:** Urinary tract infection during pregnancy, complete urinalysis, urine culture

### References

- Nicolle LE, Gupta K, Bradley SF, et al. Clinical practice guideline for the management of asymptomatic bacteriuria: 2019 update by the infectious diseases society of America. *Clin Infect Dis*. 2019; 68: e83-110.
- Lumbiganon P, Laopaiboon M, Thinkhamrop J. Screening and treating asymptomatic bacteriuria in pregnancy. *Curr Opin Obstet Gynecol*. 2010; 22: 95-9.

Table 1. Descriptive statistics of variables

	Frequency (n)/ mean ± standard deviation	Percentage (%)/median (min-max)
<b>Total urine analysis abnormality</b>		
Bacterium	29	16.3
Leukocyte	113	63.5
Nitrite	36	20.2
Age	28.76±5.48	28.00 (18.00-44.00)
Gravida	2.41±1.44	2.00 (1.00-9.00)
Parity	1.04±1.17	1.00 (0.00-5.00)
Living births	1.03±1.15	1.00 (0.00-5.00)
<b>Previous birth history</b>		
None	75	42.4
Vaginal delivery	62	35
Cesarean section	40	22.6
Weeks of gestation	25.96±11.57	27.86 (5.43-41.14)
Body mass index	28.71±5.26	28.50 (17.90-43.00)
<b>Smoking</b>		
No	170	95.5
Yes	8	4.5
Glucose	84.69±19.48	81.00 (54.00-182.00)
Hemogram	12.65±8.51	12.05 (6.70-123.00)
White blood cell	9859.20±3356.03	9285.00 (1040.00-26660.00)
<b>Total urine analysis</b>		
Leukocyte/bacteria>5	142	80.2
Leukocyte esterase +	108	61
Nitrite+	45	25.4
<b>Urine culture</b>		
No	97	54.8
Yes	80	45.2
<b>Urine culture results</b>		
No growth	62	77.5
Growth+	18	22.5
<b>Breeding microorganism</b>		
<i>Acinetobacter enterococcus</i>	1	5.6
<i>Skin flora</i>	2	11.1
<i>E. coli</i>	7	38.9
Gr(-)Rod	1	5.6
Mixed flora	1	5.6
<i>Pseudomonas</i>	1	5.6
<i>S. aureus</i>	2	11.1
<i>Strep. agactia</i>	1	5.6
<i>Strep. viridans</i>	2	11.1

## [OP-045]

## Patient Satisfaction Rate After 10 Years Who Underwent Manchester Operation

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**Introduction:** Pelvic organ prolapse (POP) is a gynecological disorder affecting women in wide range and prevalence is increasing by age. Eventhough POP is common, surgical interventions vary by compartments and by surgeon's choice. One of the uterus preserving intervention for apical POP is Manchester-Fothergill (MF) operation which is described by Archibald Donald in 1888. This procedure is a good alternative to vaginal hysterectomy for the ones who wants to keep their fertility or only the organ itself. Our purpose is to detect patient satisfaction after 10 years who underwent MF.

**Materials and Methods:** The health repository scanned to obtain the women who underwent MF operation in 2014. Patients were called and asked if they are volunteer to participate the study. Volunteers were asked to answer the questionnaire, including complaints about POP, urinary incontinence, reintervention, re-operation and socio-demographic characteristics.

**Results:** The baseline characteristics are given in Table 1. A statistically significant majority of patients who underwent MF had concomitant anterior and posterior colporrhaphy. Majority of study population had more than 3 pregnancies and delivered with normal spontane vaginal delivery. It has been observed that being pregnant after the MF operation does not impair the success of the surgery (Table 2). Of the 3 pregnant women who underwent MF before their pregnancies, 2 had a live birth with Cesarean section and 1 had abortion at the 12<sup>th</sup> gestational week. In the long-term dissatisfaction and subjective recurrence rate was 11.5%. Most patients who underwent MF had been satisfied with the surgery results during 10 years without POP. Subjective prolapse complaint was related to parity and mode of delivery. During 10 years after MF surgery reintervention rate was 7.7% (Table 3). After searching operating room database it was revealed that reintervention surgery was lateral suspension. It is understandable that concomitant sling surgery patients were complaining about SUI after 10 years ( $p=0.027$ ). *De novo* urge incontinence was not related to MF operation ( $p<0.001$ ). Patients who underwent MF operation are satisfied with the surgery during long-term period.

**Conclusion:** Patients with POP who are willing to preserve their fertility and contemplating pregnancy again may choose MF without concern of recurrent POP.

**Keywords:** POP, apical prolapse, Manchester-Fothergill, postoperative satisfaction

### References

1. Tolstrup CK, Husby KR, Lose G, et al. The Manchester-Fothergill procedure versus vaginal hysterectomy with uterosacral ligament suspension: a matched historical cohort study. *Int Urogynecol J*. 2018; 29: 431-40.
2. Ünlübilgin E, Sivaslıoğlu AA, İlhan TT, Kumtepe Y, Dölen İ. Which one is the appropriate approach for uterine prolapse: Manchester procedure or vaginal hysterectomy? *Türkiye Klinikleri J Med Sci*. 2012; 33: 321-5.

**Table 1. Baseline characteristics**

	MF (n=52)	
Age at operation	46.48±7.97 (32-65)*	
Gravidity	Nulligravid ≥1	0 (0%) 52 (100%)
Parity	Nullipar <3 ≥3	0 (0%) 15 (28.8%) 37 (71.2%)
Mode of delivery	NSD C-section	45 (86.5%) 7 (13.5%)
Concomitant surgery	No concomitant surgery Anterior and posterior colporrhaphy Mid-urethral sling surgery SSF	15 (28.8%) 36 (69.2%) 30 (57.7%) 1 (1.9%)

\*Age at operation given as mean ± SD (min-max). other data given as n(ratio). NSD: Normal spontane vaginal delivery; SSF: Sacrospinous ligament fixation

**Table 2. Distrubution of prolapse**

		Prolapse complaint		
		(+)	(-)	<i>p</i>
Pregnancy after MF operation	(+)	0	3	0.687
	(-)	6	43	

MF: Manchester-Fothergill

**Table 3. Results of intervention**

	MF (n=52)	
	n	%
Subjective POP recurrence	6	11.5
Pregnancy after MF procedure	3	5.8
Reintervention	4	7.7
Time to re-operation (years)	6.25±3.20 (3-9)*	

\*Data given as mean ± SD (min-max), MF: Manchester-Fothergill

**[OP-046]****Splenic Artery Aneurysm in Pregnancy: Surgeon's Nightmare**Ismail Demir<sup>1</sup>, Emre Karaca<sup>2</sup><sup>1</sup>Şanlıurfa Training and Research Hospital, Clinic of Obstetrics and Gynecology, Şanlıurfa, Türkiye<sup>2</sup>Şanlıurfa Training and Research Hospital, Clinic of General Surgery, Şanlıurfa, Türkiye

**Aim:** Splenic artery aneurysm (SAA), a rare condition chiefly affecting women, poses significant challenges for management when it occurs during pregnancy. Reports of successful management of SAA before rupture in pregnancy are limited, with several post-rupture cases reported. We describe a case that is 13 weeks of pregnancy with a ruptured SAA.

**Case:** A 26-year-old woman with two previous term pregnancies with cesarean. The patient was sent by emergency services beyond the Turkish Syrian border. Her symptoms were dizziness, abdominal discomfort, pain and nausea. The patient has been underwent an ultrasound examination for abdominal pain. Intraabdominal free fluid was found. Ruptured adnexal mass, heterotopic pregnancy, uterine rupture and acute appendicitis were considered as preliminary diagnosis. Infection markers was negative, uterin cavity was intact and adnexal parts were normal. During examination, the patient started to present hemorrhagic shock symptoms so explorative laparotomy was immediately performed. As first approach under spinal anesthesia,

pfannenstiel's incision was performed and after drainage of hemorrhagic fluid, exploration of uterus and adnexal parts were intact. Perioperative general surgery consultation was requested and the incision was enlarged to the median line and after exploration bleeding ruptured aneurism was found and splenectomy was performed.

**Discussion:** Although SAA is rare in pregnancy, it is important to maintain awareness of this condition due to the high maternal and fetal mortality rate due to post rupture.

**Conclusion:** It is also important to maintain awareness of this condition in pregnancy to avoid misdiagnosis. Immediate action is necessary following diagnosis to ensure optimal maternal and fetal outcomes.

**Keywords:** Splenic artery aneurysm, hemorrhagic shock, rupture

**References**

1. Wiener Y, Tomashev R, Neeman O, et al. Splenic artery aneurysms during pregnancy: An obstetric nightmare. *Eur J Obstet Gynecol Reprod Biol.* 2019; 237: 121-5.
2. Sadat U, Dar O, Walsh S, Varty K. Splenic artery aneurysms in pregnancy--a systematic review. *Int J Surg.* 2008; 6: 261-5.
3. Abhari P, Abhari S, Jackson A, Moustafa ASZ, Mercer L, Ashraf M. Splenic artery aneurysm case report. *Case Rep Obstet Gynecol.* 2019; 2019: 8347983.
4. Corey EK, Harvey SA, Sauvage LM, Bohrer JC. A case of ruptured splenic artery aneurysm in pregnancy. *Case Rep Obstet Gynecol.* 2014; 2014: 793735.
5. Parrish J, Maxwell C, Beecroft JR. Splenic Artery Aneurysm in Pregnancy. *J Obstet Gynaecol Can.* 2015; 37: 816-8.
6. Nanez L, Knowles M, Modrall JG, Valentine RJ. Ruptured splenic artery aneurysms are exceedingly rare in pregnant women. *J Vasc Surg.* 2014; 60: 1520-3.

[OP-047]

**Correlation of HPV Positivity and Type with Colposcopy Results in Patients with Atypical Squamous Cells of Undetermined Significance (ASC-US)**

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**Introduction:** In our study, we aimed to investigate patients with atypical squamous cells of undetermined significance (ASC-US) smear results by considering their previous smear, previous Human Papillomavirus (HPV) and current HPV results and evaluating the effects of these parameters on colposcopy and early childhood caries (ECC) results.

**Materials and Methods:** This is a retrospective descriptive cross-sectional study conducted between January 2022 and June 2022. Between January 2014 and January 2022, among those between the ages of 30-65 with ASC-US smear results and a performed colposcopy, 217 patients who met the inclusion and exclusion criteria were included in the study. Patients' age, gravida, parity, previous smear, previous HPV, current HPV and colposcopy results were recorded. HPV results were classified as negative, HPV 16/18 positive, and HPV other high-risk positive. Colposcopy and ECC results were classified as negative, low-grade squamous intraepithelial lesion (LSIL), and high-grade squamous intraepithelial lesion (HSIL). Colposcopy and ECC results of the patients were compared with previous smear, previous HPV and current HPV results.

**Results:** Considering the results of 217 ASC-US patients with a mean age of 41.8±8.75 years, a statistically significant correlation was found between previous smear, previous HPV and current HPV results with colposcopy. When the previous smear and previous HPV results of the patients were examined, considering that the previous smear result is negative, patients who are ASC-US or LSIL negative based on their previous HPV results, HPV type 16/18 positive

and HPV other high-risk positive, a statistically significant correlation was found between them and colposcopy results ( $p=0.001$ ,  $p<0.001$ ,  $p=0.007$ ). Considering the previous and current HPV positivity of the patients, previously HPV negative patients had a lower risk of HSIL compared to patients previously with HPV type 16/18 positive and other high-risk positive results. In patients with a previous HPV negative result, when the current HPV negative, HPV 16/18 positive and HPV other vii high-risk positivity were evaluated, a statistically significant correlation was found between colposcopy results ( $p=0.001$ ). When the ECC results of the patients were compared according to the previous smear, previous HPV and current HPV status, a correlation was found between ECC results and previous HPV results ( $p=0.023$ ). In the group of patients whose previous HPV result was positive for type 16/18, the risk of HSIL was found to be highest in ECC.

**Conclusion:** While there is sufficient evidence for the management of many subgroups in terms of cervical pathologies, the optimal approach is still unclear for the management of ASC-US. Follow-up and treatment with the right indication both helps patients undergo less invasive procedures and minimizes both costs and labor. In the case of HPV positivity in patients whose smear results are ASC-US, we often referred to colposcopy. At the beginning of our study, we started by looking for an answer to the question, "Should we evaluate every patient with equal risk?". In our study, we evaluated the patient with the combination of current and recent cytology results and have drawn to the conclusion that every patient with the same current results should not be evaluated with equal risk, and the decision of colposcopy and ECC should be made considering the previous smear and HPV status of the patients.

**Keywords:** ASC-US, ECC, HPV, colposcopy, smear

**References**

- Gage JC, Hunt WC, Schiffman M, et al. Similar risk patterns after cervical screening in two large US populations: implications for clinical guidelines. *Obstet Gynecol.* 2016; 128: 1248-57.
- Demarco M, Egemen D, Raine-Bennett TR, et al. A study of partial human papillomavirus genotyping in support of the 2019 ASCCP risk-based management consensus guidelines. *J Low Genit Tract Dis.* 2020; 24: 144-7.
- Egemen D, Cheung LC, Chen X, et al. Risk estimates supporting the 2019 ASCCP risk-based management consensus guidelines. *J Low Genit Tract Dis.* 2020; 24: 132-43.

**Table 1. Relationship between previous HPV results and current HPV results and colposcopy results**

				Colposcopy			p-value
				Negative	LSIL	HSIL	
Previous HPV	Negative	Current HPV	Negative	36 (92.3%) <sup>a</sup>	3 (7.7%) <sup>b</sup>	0 (0%) <sup>a,b</sup>	<b>0.001</b>
			High risk	31 (70.5%) <sup>a</sup>	12 (27.3%) <sup>a</sup>	1 (2.3%) <sup>a</sup>	
			HPV 16,18	5 (35.7%) <sup>a</sup>	7 (50%) <sup>b</sup>	2 (14.3%) <sup>b</sup>	
	High risk	Current HPV	Negative	6 (85.7%) <sup>a</sup>	1 (14.3%) <sup>a</sup>	0 (0%) <sup>a</sup>	0.132
			High risk	24 (36.9%) <sup>a</sup>	30 (46.2%) <sup>a</sup>	11 (16.9%) <sup>a</sup>	
			HPV 16,18+	10 (52.6%) <sup>a</sup>	7 (36.8%) <sup>a</sup>	2 (10.5%) <sup>a</sup>	
	HPV 16,18 +	Current HPV	Negative	-	-	-	0.999
			High risk	0 (0%) <sup>a</sup>	0 (0%) <sup>a</sup>	1 (100%) <sup>a</sup>	
			HPV 16,18+	6 (15.8%) <sup>a</sup>	16 (42.1%) <sup>a</sup>	16 (42.1%) <sup>a</sup>	

LSIL: Low-grade squamous intraepithelial lesion; HSIL: High-grade squamous intraepithelial lesion; HPV: Human papillomavirus

**Table 2. Patients' risk of developing HSIL according to their previous smear, previous HPV and current HPV status**

		Risk	Risk ratio	95% confidence interval	Odds	Odds ratio	95% confidence interval
Previous smear- colposcopy	Positive	0.177	1.55	0.81	0.21	1.67	0.78
	Negative	0.114		2.96	0.12		3.54
Previous HPV-colposcopy	Positive	0.23	7.46	2.34	0.3	9.4	2.77
	Negative	0.03		23.73	0.03		31.83
Current HPV- colposcopy	Positive	-	-	-	-	-	-
	Negative	-		-	-		-

**Table 3. Relationship between ECC results and patients' previous smear, previous HPV and current HPV results**

Negative		ECC			p-value
		LSIL	HSIL		
Previous smear	Negative	107 (93.9%)	2 (1.8%)	5 (4.4%)	0.852
	ASC-US	65 (94.2%)	2 (2.9%)	2 (2.9%)	
	LSIL	42 (95.5%)	0 (0%)	2 (4.5%)	
Previous HPV	Negative	94 (96.9%)	2 (2.1%)	1 (1%)	0.023
	High risk	86 (94.5%)	2 (2.2%)	3 (3.3%)	
	HPV HPV 16,18+	34 (87.2%)	0 (0%)	5 (12.8%)	
Current HPV	Negative	46 (100%)	0 (0%)	0 (0%)	0.1
	High risk	104 (94.5%)	3 (2.7%)	3 (2.7%)	
	HPV 16,18+	64 (90.1%)	1 (1.4%) <sup>a</sup>	6 (8.5%)	

LSIL: Low-grade squamous intraepithelial lesion; HSIL: High-grade squamous intraepithelial lesion; HPV: Human papillomavirus, ECC: early childhood caries