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Part One Oral Presentations

Section I Endoscopy and MIGS

001 Paravaginal Repair and High Uterosacral Suspension: An Alternative to The Mesh?

Inge Putri

Introduction:

Surgery for anterior wall prolapse from the lateral detachment secondary to paravaginal defect able can be performed laparoscopically, this approach is able to reduce the risk of vaginal shortening (1). Compared to anterior colporrhaphy, the laparoscopic paravaginal repair is a much more anatomic repair of anterior vaginal wall prolapse caused by lateral defects (2).

Objective:

To describe our technique for robotic assisted paravaginal repair (level 2 support) along with high uterosacral suspension (level 1 support).

Methods and results:

We present a case of a 55-year-old patient who had recurrent symptomatic prolapse following an anterior repair, posterior repair, as well as sacrospinous fixation and vaginal hysterectomy performed 18 months ago. She was a Para 4, with a history of normal vaginal births and BMI 30. Findings preoperatively was Aa +1, Ba +2, Ap +2, Bp +2, C 0, as well as a widened genital hiatus. Prior to surgery, her preoperative assessment was Aa +1 Ba +2 C -10 Ap -2 Bp -2 Pb 3 TVL 10 Gh 3. She was also found to have shallow vaginal fornixes, secondary to paravaginal defect.

Firstly, we establish the retropubic space through backfilling of the bladder with normal saline, in the setting of previous anterior repair, meticulous dissection was performed through adherent tissues. Secondly, the lateral aspect of the anterior vaginal wall is sutured to the arcus tendinous fascia pelvis (ATFP), or the "white line", this re-approximation of vaginal wall to fascia overlying obturator internus muscle will restore bladder and bladder neck to its normal anatomical position. This repair is performed bilaterally with a nonabsorbable Ethibond excel sutures and knots are tied intracorporeally. Following this, the uterosacral ligaments are identified and the space of Okabayashi is opened to identify ureters and bladder peritoneum opened and bladder dissected away to reveal the pubo-vesical fascia. A non-dissolvable suture (0 Ethibond excel or 0 Prolene suture) is used to plicate the uterosacral ligament to the bulky uterosacral ligament to the peri cervical ring and incorporating the rectovaginal fascia. Following this, the suture is tied intracorporeally with 5 squared knots. The procedure is then repeated on the other side.

Conclusion:

We consider this technique an armamentarium to the routine vaginal route of prolapse repair.

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002 Overcoming the Giants, Managing the Difficult Total Laparoscopic Hysterectomy

Inge Putri

Objective:

To demonstrate different techniques in navigating a difficult Total Laparoscopic Hysterectomy

Methods:

To showcase a video presentation in overcoming the more challenging cases of performing total laparoscopic hysterectomy, when bowel adhesions are encountered in a patient with a prior midline laparotomy, when bladder adhesions are present, as well as reducing blood loss in a large multifibroid uterus.

Results:

1. Stop and be cautious of bowel adhesions
   - Only divide adhesions that is restricting access to pathology or contributing to patient's symptoms
   - Visualise adhesions from multiple angles, to gauge their full extent and assess omental/ small or large bowel involvement
   - If you can see through it, you can cut through it (transparent adhesions)
   - Cold scissors should be used – particularly for dense adhesions
   - When in doubt, leave fascia on bowel.
2. Slow down and carefully assess the adherent bladder
   - The low lateral approach is used to find the avascular plane between bladder and cervix
3. Go to the pelvic side walls and reduce bleeding at its source
   - Open the round ligament and broad ligament to allow for retroperitoneal dissection to the origin of the uterine artery from the anterior branch of the internal iliac artery following location of the obliterated umbilical artery and ureterolysis. This should be done bilaterally.

Conclusion:

Laparoscopic hysterectomy is proven to have multiple patient benefits such as lesser pain and shorter hospital admissions. When encountered with challenges of a difficult laparoscopic hysterectomy, it is important to approach them in a systematic manner as described.

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003 A 5-Years' Experience of Total Laparoscopic Hysterectomy Without Uterine Manipulator. Single Institution Retrospective Study Of 882 Cases.

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Objective:

The aim of the retrospective study was to investigate the feasibility and safety of the total laparoscopic hysterectomy without uterine manipulator.
Methods:

This is the retrospective study of cases of total laparoscopic hysterectomy without uterine manipulator, performed in one institution between January 2016 and March 2022 in women with benign indications for hysterectomy. The patients' medical records were used as the database for the study, surgical procedure details, intra and postoperative complications were evaluated.

Results:

882 cases of Total Laparoscopic Hysterectomy (TLH) from January 2016 to March 2022 are reported. Mean age of patients was 52,8 years (range, 29 – 88 years), approximately half of the patients were postmenopausal. BMI ranged between 23.4 kg/m2 and 44, 3 kg/m^2 the mean operative time was 37 minutes (range, 25-110 minutes). The estimated blood loss was 59.6 ml (range, 20-200 ml), the median uterine weight was 273,3 g.(45-780g), the average length of stay in hospital was 58 hours (range 47-71 hours). Total number of complications was 28 (3.2%). Intraoperatively there were five cases of conversion to laparotomy (0.6%), due to large uterine size, a ureteral stent was placed in three cases (0,3%). Laparoscopic revision was performed in five cases (0,6%) because of pelvic haematomas. Urinary tract infection in six cases (0,7 %), blood transfusion was performed in seven cases (0.8%), including 3 cases of preoperative blood transfusion due to severe anaemia. We reported two cases of vaginal vault dehiscence in the postoperative period, managed through vaginal approach. A positive correlation was revealed between uterine weight and intraoperative blood loss volume. (Pearson Correlation =0,564, P<0.001.)

Conclusion:

The study shows that THL without uterine manipulator is the feasible and safe procedure due to its low complication rates, short operative time and hospital stay.

004 Early-stage Cervical Cancer with Tumour Size under two centimetres associated with good safety and comparable efficacy outcome in minimally invasive surgery compared with abdominal radical hysterectomy: systematic review and meta-analysis.

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Background: Abdominal radical hysterectomy (ARH) is the standard treatment for early-stage cervical cancer (ECC). Optional treatments using minimally invasive surgery (MIS) are still debatable.

Objective:

To compare efficacy and safety of MIS and ARH in ECC.

Methods:

Relevant literature in databases were retrieved from 2012-2022. Studies comparing MIS (Laparoscopic/Robotic) and ARH in ECC were involved. Primary outcomes involved overall survival (OS) and disease-free survival (DFS) for efficacy. Blood loss, intra and post-operative complications categorized as safety outcomes. In addition, we performed sub-analysis based on tumor size, year of event, and type of MIS. Meta-analysis was performed by RevMan 5.4

Results:

42 studies involving 26.636 patients were included. Although DFS is superior in ARH (OR=1.49;95%CI=1.27-1.74; p<0.00001), in sub analysis group with tumour size ≤2cm, MIS wasn't inferior compared to ARH in 5-year DFS (p=0.07). MIS and ARH had no difference in OS (p=0.07), but patients with tumour size >2cm at 5-year OS, MIS showed inferiority (OR=1.76;95%CI=1.06-2.91; p=0.03). MIS has better safety outcome in blood loss (MD=(-198.5);95%CI=(-262.4) -(-134.36);p<0.00001). Although there was no difference in total intra-operative complications, robotic subgroup was significantly better than ARH (OR=0.35;95%CI=0.18-0.68; p=0.002).

Conclusion:

MIS is proven have good safety outcomes. Adjusting tumour size, especially ≤2cm has potential to provide efficacy outcomes comparable to ARH.

005 Laparoscopy as an Effective Microsurgery Option for Niche Repair Without Hysteroscopy Assistance.

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ABSTRACT

Introduction. The rising rate of Caesarean Section (CS) in recent decades increases the risk for surgical incisions scar in the uterine wall to rise. The uterine scar defect or insufficiency caused by incomplete healing of myometrium is also called niche, isthmocoele or scar dehiscence. A niche with as result an indentation is reported to be the highest risk factor associated with symptoms of abnormal uterine bleeding, dysmenorrhea, chronic pelvic pain, subfertility, and near uterine rupture during a subsequent pregnancy(1). The reported incidence of niche complications is 1,9% of CS cases, 30% of cases are found 6-12 months after CS. Some rreconstructive niche surgery often uses a dual laparoscopic approach with the aid of observation illuminated by the hysteroscope (2,3).

Case:

We report a case Mrs. N, 31 years old post CS 115 days before. The main complaint of this patient is heavy-frequent menstrual bleeding with irregular bleeding episodes (Abnormal Uterine Bleeding (AUB)). The AUB episodes did start one month after the second SC. The indication for the last CS was placenta previa accompanied by antepartum bleeding, alive baby weighing 2300 gram at birth. When the patient has been referred to our clinic with a diagnose anaemia caused by AUB caused by the dehiscent uterine scar (niche). Patient and partner still have the desire to become pregnant again.
At the department be main clinical examination consists of using ultrasound examination and evaluation. Maximizing the function of the transvaginal ultrasound and sonoinfusion sonography. The diagnostic tools used are color doppler imaging and 4-dimensional (4D) imaging Ultrasound results: uterus in anteversion Ø 7.89 x 4.49 x 3.65 cm. Endometrial thickness: 8.9 mm, homogenic and hypoechoic appearance. A defect was found on the interior wall of the right lateral lower uterine segment in the shape of an inverted "V" with a width of 0.85 and a depth of 0.51 cm with increased vascularity. The niche area > 2 cm square and the residual myometrium did measure 1,8 - 2,6 mm. Located 0.8 cm from the right uterine artery, no free liquid in the Douglas pouch. Right Ovary: 1.76x

1.16x2.38 cm. Left Ovary: 1.98x 1.81x 1.78 cm. These results point at a high risk for uterine wall perforation if operative hysteroscopy is performed.

Laparoscopic Procedure:

Laparoscopy for niche repair was performed at 25 August 2022 at 411 Operating theatre in Dr. Soetomo hospital qualified as an urgent surgery. Operation time 1 hr and 25 minutes with less than 50 cc measured blood loss. The sequence of steps during operation is as follows: remove the uterine attachment, identify the niche area with the injection of methylene blue into uterine cavity, excise the uterine scar and separate the peritoneal lining, suture the uterus using the 1-layer vertical mattress sutures using the "far-near-far-near" technique with a distance of ± 0,8 cm, testing of the watertightness of the anterior wall uterine suture with repeated injections of methylene blue solution to the uterine cavity, and interrupted reperitonealization. The materials used during the operation are: methylene blue contrast liquid using a pediatric catheter whose tip is inserted into the uterine cavity, monofilament thread which is absorbed for the size number 1 and 4.

Clinical Discussion :

The accuracy of choosing a laparoscopic surgery technique over a laparotomy is an advantage considering the principles of gynecology micro-reconstructive surgery (3). The advantages of laparoscopic surgery in these patients include the reduced potential for infection. Lack of touching the organ by the operator's hands and a good control of the bleeding can reduce postoperative adhesions. The Halstedian principle, maintaining tissue wet, is more easily controlled by irrigation. Precision electrocautery can reduce the amount of tissue damage due to desiccation. Smaller instruments and optical visibility and lighting help operators to perform actions in reduced operating fields. However, the laparoscopic technique is highly dependent on the skills of the operator (4). To improve the outcome of suturing in this case, the correct way is to start removing the tissue adhesions around the niche. Identify niche position, depth and breadth of niche and ischemic areas. Tissue debridement or resection are carried out by minimizing tissue trauma guided by the blue tissue area. A suture in a far-near-near-far vertical mattress way is appropriate to bring the myometrial tissue closer to the inside and outside. The vertical mattress technique ensures vascularization of the uterine arteries that run vertically lateral to the uterus in most of the cases. This suturing pattern can bring the two sides of the myometrial tissue closer from inside to the outside and does not cause indentations on the inner and outer suture surfaces. The choice of thread for this procedure is appropriate based on the principles of microsurgery. The fact of separating the serosa of the uterus, as wide as one cm from the wound edges, to prevent distortion of the architecture of the uterine wall at suturing will also accelerate the tissue integration. After suturing the myometrium and testing for water tightness, one can continue with the reperitonealization sutures (5,6,7,8). The healing period of tissues of the myometrium operated upon depends not only on the surgical technique but also on the general condition of the patients and hormonal cyclic influences on the uterine muscle. Post operative patient follow up can also be done by observing the menstrual pattern. The choice of combined oral contraception is the right choice for mothers who are not in the exclusive breastfeeding period. The period of giving combination oral contraception in the literature varies greatly, at least 12 months of use as a dual function for contraception (1,3).

Conclusion:

The presence of AUB within 6-12 months after CS must be considered for ultrasound evaluation with suspicion of niche. Optimizing the use of transvaginal ultrasound examination is very useful for the diagnosis and the description of the conditions that will be encountered during surgery. Laparoscopy is an appropriate choice for the application of the microsurgery principles on the reproductive organs in cases where niche repair is mandatory. The vertical mattress suturing technique with a 'far-near-far near' pattern is one of the right choices. The use of short-term combined oral contraceptive methods is an appropriate choice during post laparoscopy transvaginal ultrasound follow up.

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006 Twin Pregnancy After Laparoscopic Myomectomy of Subserous Myoma: A Case Report

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Objective

The purpose of this article is to report a case of laparoscopic myomectomy in an infertile patient.

Methods

We report the case of a 27 years old women who is referred to our hospital with abdominal distension and vaginal bleeding. An ultrasonic examination confirms a uterus containing a subserous myoma of 4,34 x 2,31 cm. Preoperative we performed a SIS procedure to evaluate the implantation of the myoma. At Laparoscopy an enlarged uterus was found (myoma 6 x 6 cm on the posterior side of the uterus). We decided to perform a myomectomy where we penetrated 4-5 cm into the uterine cavity. The endometrium was repaired with a continuous suture and the myomectomy wound was sutured in two layers with monofilament. The entire myoma was removed using a morcellator. The total duration of the operation was 55 minutes.

Result

Three months post-surgery the patient experienced a spontaneous twin pregnancy.

Conclusion

Laparoscopic myomectomy offers advantages as compared to laparotomy; as there are as a small incision, a fast recovery, reduced postoperative pain and first choice surgery for women in their reproductive age who desire fertility. Laparoscopic myomectomy does significantly improve patient's fertility rate in subserous myoma depending on the age of the patient, the diameter of myoma and the location of myoma.

007 Successful Laparoscopy Assisted Extirpation of a Very Large "Born" Myoma, a Vaginal Prolapse of a Type I Intramural - Submucosal Leiomyoma with a three cm Stalk: A Case Report.

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Objective

This article is reporting a case of a rare vaginal prolapse of a type I intramural - submucosal leiomyoma, with the size of a "baby head". It is a Type I leiomyoma, mimicking a Type 0 appearance because of its pedunculated stalk connecting the intramural with submucosal part of the myoma. The submucosal part did grow, prolapsing beyond the cervix, to be "born" and visible at the vaginal introitus. Although leiomyomas are common, submucosal leiomyomas prolapsing are uncommon. Moreover, a very large vaginal prolapse of a type I leiomyoma is rare. Vaginal extirpation is common for the Type 0 leiomyomas, whilst laparoscopic myomectomy is the common technique for type I, suggested to be performed if the mass does not exceed ten cm and their number does not exceed four. Despite its huge size, we decided to stick with minimally invasive treatment for its advantages by combining both techniques.

Methods :

A 35-year-old nulliparous, unmarried, woman complaining of AUB had been hospitalized and given several blood transfusions due to severe anaemia with the lowest Haemoglobin level at 2,6 g/dL. A bulky mass was visible at the vaginal introitus. An MRI found the submucosal part to measure 15,86 x 9,67 x 8,82 cm and the intramural part of 2,92 cm, with a +/- 3 cm stalk-form connecting both parts. Laparoscopy was performed. The intramural part was excised at the margin of the peduncle and pulled out using laparoscopic Kocher's. The remaining intracavity mass was pulled out by vaginal gentle pulling and twisting, extracting its prolapsed vaginal portion using a myoma extractor device. The uterine defect was stitched using a baseball suture by laparoscopy. At the end of the procedure an IUD was inserted to prevent adhesions. The operation went without any significant difficulties.

Result:

Postoperatively the patient remained in the hospital for five days, and was discharged in good condition without AUB or other significant complications. Patient was relieved and happy with the result.

Conclusion :

The management of leiomyomas depends on the symptoms, the myoma characteristic, and the need to preserve fertility. In this case, we discussed the best treatment to be most beneficial to the patient. Minimally invasive surgery was chosen for its advantages of being less traumatic, quicker recovery, and possibility to preserve fertility.

008 Uterus Unicornis with Haematometra presenting with a Non-Communicating Left Horn and a history of Abdominal Pregnancy: A Rare Case

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Objective:

The uterus unicornis with non-communicating horns is a rare Müllerian anomaly (incidence 0.06%). The condition is complicated by severe pelvic pain due to haematometra or endometriosis causing retrograde menstruation. The aim this study is to describe a case of uterus unicornis with non-communicating horns with the aim to prevent delayed diagnosis and serious complications.

Methods:

This case report concerns a 39 year out female, presenting with as main complaint severe dysmenorrhea for 5 years. The patient had been treated by hormonal therapy but the complaints did not diminish. Her only child is 19 years of age and in her history an abdominal pregnancy. Ultrasound resulted in detecting an endometrioma of 2.8 x 3 cm. The patient was planned for laparoscopic surgery and at surgery a uterus unicornis was found at the right side of the patient with a normal cervix and further a haematometra in a non-communicating left horn which did rupture upon release of the adhesions present causing chocolate fluid leakage. There was also a left side endometrioma of 3 x 3 cm. Hysterectomy and bilateral salpingo-oophorectomy were then performed.

Result:

The correct diagnosis of uterus unicornis with non-communicating horns has important clinical implications, but is sometimes misdiagnosed. The abdominal pregnancy in this patient could occur in the rudimentary horn following transperitoneal migration of sperm or zygote and would have resulted in a life-threatening situation if it ruptured. Severe dysmenorrhea during hormonal therapy in this patient can be caused by the haematometra in the non-communicating left horn and the endometrioma. Laparoscopic hysterectomy was chosen to remediate to the main complaint.

Conclusion:

The uterus with unicornis with non-communicating horn is a rare condition, but it can cause serious complications. Laparoscopy was essential to confirm the diagnosis and should be considered as therapy to avoid associated morbidity.

010 Davydov Procedure in Mayer-Rokitansky-Küster-Hauser Case.

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Objective:

Reporting one case of Davydov procedure in a Mayer-Rokitansky-Küster-Hauser (MRKH) case where the neovagina successfully did remain patent.

Case:

We report the case of a 26 years old married woman complaining of primary amenorrhea and unable to have intercourse. At clinical evaluation, the findings are that the secondary sexual characteristics are positive, chromosome examination reveals 46 XX, and at gynecologic examination, the vaginal opening is not present. MRI examination results showed a rudimentary uterus, and normal ovaries. The diagnosis of MRKH. Davydov procedure was chosen for the creation of a neovagina. A vaginal mould has been placed for three months, and post-operative dilator application was routinely applied. FSFI questionnaire is used for evaluating the sexual function.

Result:

The patency of the neovagina has been successfully obtained. The vaginal canal length is of 7 cm, and the genital hiatus is of 2.5 cm. Intercourse and penetration are possible, however, the FSFI questionnaire score is 20.4, indicating sexual dysfunction. Also, the patient still complains about pain during intercourse.

Conclusion:

The Davydov procedure is one of the surgical approaches for the creation of a neovagina in cases presenting with MRKH. Neovaginal patency can be reached if a dilator is routinely applied post-operatively. A holistic approach to sexual function after the procedure, particularly the pain aspect, is mandatory for further research.

012 Two cases of ureteral duplication diagnosed during robot-assisted total laparoscopic hysterectomy

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Objective:

The incidence of ureteral injury during total laparoscopic hysterectomy was reported to be approximately 0.35%, and anatomical variations in the ureter are a risk factor for ureteral injury. To prevent ureteral injury, understanding the anatomy around the cardinal ligament and

identification of the ureters are fundamental. We report two cases of ureteral duplication that were incidentally diagnosed during robot-assisted total laparoscopic hysterectomy.

Case:

Case 1: A 53-year-old woman (gravida 2, para 1) presented with menorrhagia and anaemia associated with adenomyosis. A robot-assisted total laparoscopic hysterectomy was scheduled. While dissecting the retroperitoneal space and tracing the course of the ureter, the duplex ureters were identified on both sides, leading to a diagnosis of bilateral ureteral duplication. The operative time was 57 min, and the intraoperative blood loss was minimal.
Case 2: A 44-year-old woman (gravida 2, para 2) had uterine fibroid and adenomyosis. Robot-assisted total laparoscopic hysterectomy was planned. Fibrosis and adhesions associated with endometriosis were found around the left ureter. After the uterine artery was isolated and the left ureteral peristalsis was observed, a ductal structure with peristalsis was also observed on the caudal side of the left ureter. The operative time was 85 min, and the intraoperative blood loss was 100 g. In both cases, the surgery was completed without any ureteral injury.

Conclusion:

In most cases, ureteral anatomical anomalies are not diagnosed preoperatively; therefore, confirmation of the ureteral anatomical orientation is crucial to prevent ureteral injury in minimally invasive hysterectomy. In gynecologic surgery, knowledge of the pelvic anatomy, including anatomical variants, is important to prevent complications.

016 Laparoscopic Salpingectomy in Ruptured Ectopic Pregnancy: A Case Report.

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Objective

To understand the safety and effectiveness of laparoscopic salpingectomy management of ruptured ectopic pregnancy.

Case:

Patient 30 years old came to the emergency room with acute abdominal pain. At clinical examination the blood pressure was 80 mm Hg, palpation revealed a slinger pain. A pregnancy test was positive. The diagnosis of ruptured ectopic pregnancy was established. Thirty minutes later, patient went to operating theatre, a laparoscopic procedure was performed.

Results:

At laparoscopic view, a haemato-peritoneum was found inside the abdominal cavity. During the exploration, a ruptured ectopic pregnancy was found in the right ampullary part of the tube. A right salpingectomy was performed, the active bleeding was treated, and blood clots were removed. The Hb level before operation was 11 g/dl, during surgery, two units of packed cells were given. Patient was discharged 1 day after surgery, with VAS 2 and Hb level 9 g/dl.

Conclusion

Laparoscopic salpingectomy can be safely and effectively utilized even in cases of ruptured ectopic pregnancy provided the anaesthetic team is comfortable with the procedure.

018 Safety and Feasibility of Total Laparoscopic Retrograde Hysterectomy (TLreH) In Patients with Frozen Pelvic Due to Severe Endometriosis.

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Background:

Surgical treatment of severe endometriosis is often challenging. This surgery often requires hysterectomy as a definitive treatment. Most of hysterectomies can be performed laparoscopically in general way but in some cases complicated by frozen pelvic conditions due to severe endometriosis, it needs another technique such as retrograde hysterectomy. There exists no study in Indonesia that reports the safety and feasibility of total laparoscopic retrograde hysterectomy (TLreH) in patients with frozen pelvic due to severe endometriosis.

Objective:

To examine the safety and feasibility of total laparoscopic retrograde hysterectomy (TLreH) in patients with obliterated cul-de-sac due to severe endometriosis.

Methods:

This retrospective observational study was performed at the Fatmawati National Hospital between January 2020 and Februari 2023. Seventeen women who underwent TLreH and who had uterine fibroids, adenomyosis, or both, complicated by frozen pelvic due to severe endometriosis were enrolled.

Results:

Surgical outcomes were retrospectively analysed. The median operation time was 240 min (range, 165-390) and the median blood loss was 125 mL (range, 80-500). There were no cases of conversion to open surgery. Intraoperative complication occurred in two cases; both were lacerations of the rectum serosa. The median post operative pain was VAS 2. Post operative blood transfusion was required in two cases, both did get only 250 ml PRC transfusion. Post operative complication occurred in one case (ureterovaginal fistula). The median post operative length of stay was 4 days.

Conclusion:

Our study demonstrated that TLreH for severe endometriosis with frozen pelvic was feasible and safe.

020a A Five-Year Trend and Experience of Laparoscopic Bilateral Tubal Sterilization using Falope Rings in a Single Centre at Sardjito Hospital, Yogyakarta, Indonesia

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Objective:

Laparoscopic bilateral tubal sterilization using Falope rings is one of the most efficient yet effective procedure of permanent contraception. The demographic and geographic variety in Indonesia have provided certain challenges and uniqueness in each procedure, including in Yogyakarta province. The objective of this study was to depict the sociodemographic characteristics, techniques, and associated complications in the course of 5 years in a single centre.

Method:

This study was a retrospective analysis of the laparoscopic bilateral tubal sterilization procedures using Falope rings which were conducted in Sardjito hospital over a five-year period from January 1st, 2018 until December 31st, 2022.

Results:

A total of 1,040 laparoscopic bilateral tubal sterilization using a trans-umbilical trocar with Falope rings were performed in Sardjito Hospital over five years. It was shown a trend of increasing numbers of procedures over the time period, from 89 in 2018, 201 in 2019, 153 in 2020 (decreased due to Covid pandemic), 272 in 2021 and 325 procedures in 2022, which was three times higher than in 2018. The patients originally came from 6 regions in 2 provinces, Yogyakarta and Central Java. The average age of the patient was 38.7 ± 4.7 years old. Patients with > 2 children were 50.2%, meanwhile 49.7% have equal and less than 2 children. It was observed that in the year of 2022, 96% of the procedures were successful without any complication and pregnancy, meanwhile 4% did fail (n= 12 out of 325) caused by severe adhesions due to the patients surgical history or pelvic inflammation, endometriotic cyst, severe obesity and acute hypertension of the patient. The patients with failed laparoscopic tubal sterilization were counselled to have another long term contraceptive methods (IUD or implant).

Conclusion:

Laparoscopic tubal sterilization is associated with a low failure rate, low morbidity and therefore it is safe in women even with previous pelvic surgery. Due to the increasing trend in patient numbers who undergo this procedure, it is important for a single centre to improve the data collection and analysis, in order to upgrade the quality service and in doing so reduce the complication rate in the future.

022 Clinical outcomes of Laparoscopic assisted vaginal hysterectomy (LAVH) combined with Bilateral uterine artery ligation (BUAL) procedure.

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Objective:

To evaluate whether performing of bilateral uterine artery ligation (BUAL) is safe and effective during LAVH procedures and could reduce risks of transfusion, laparotomic conversion, and intraoperative injury in case of large sized uterus.

Methods:

This was a retro prospective cohort study performed by a single surgeon Yong Soon Kwon in the Department of Obstetrics and Gynecology, Nowon Eulji Medical Center, Eulji University from April 2019 to September 2022, excluding patients with malignancy. A total of two hundred and five patients underwent the operation. Analytic parameters are operation time, uterus weight, total blood loss, before and after differences in haemoglobin level, hospital stay and intraoperative and postoperative complications.

Results:

The mean age (year) of the patients were rounded up to 48.58 ± 5.29 years. Patients without adhesiolysis (85.7%) was mainstream compared to whom with adhesiolysis (24.3%). The percentage of pathologic diagnosis of leiomyoma and adenomyosis was similar. Patients with both were majority. Others including Endometrial hyperplasia, Cervical intraepithelial neoplasm was also detected in minority. The mean operation time was less than an hour, 55.96 ± 16.54 (minute). Total Estimated blood loss was 85.57 ± 89.96 (mL). Mean hospital stay was 4.37 ± 0.78 (day). The change between pre- and post-operation haemoglobin change wasn't significant. The difference was less than 1g/dL. None of the patients included in this study was given intraoperative transfusion and there was no case of conversion to laparotomy. Longer operation time (71.38 ± 23.71 (min)) contrary to LAVH without adhesiolysis (53.39 ± 13.49 (min)) (P=<0.001) was noted. Patients with adhesiolysis had greater total EBL. (149.31 ± 152.78 (mL) to 74.94 ± 69.69 (mL) P=0.015). Total hospital stay was a bit lengthened in patients with adhesiolysis compared to without (4.76 ± 1.09 (day) to 4.31 ± 0.7 (day) P=0.04).

Conclusion:

It is safe and effective to perform LAVH under BUAL. Also, LAVH under BUAL prevented postoperative bleeding and could keep the stable recovery period after the operation. BUAL can make it possible safely to perform LAVH with a huge sized uterus.

023 Advanced Laparoscopic surgical technique for Focal Uterine Adenomyosis.

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Objective:

We evaluated the efficacy and outcomes of the new advanced laparoscopic adenomyosis resection with the wedge resection technique in focal uterine adenomyosis and introduce the new surgical technique.

Methods:

From February 2019 to February 2020, 49 patients who received a t adenomyosis resection by the new surgical technique were enrolled in the study. The inclusion criteria were the presence of focal-type adenomyosis diagnosed by ultrasonography or magnetic resonance image (MRI) that was refractory to medical treatments and patients with a strong desire to preserve their uterus. All operations were performed by a single surgeon with a uniform technique under TOUA (Transient Occlusion of both Uterine Arteries).

Results:

The mean patient age was 40.53 ± 5.93 years. The mean ± SD diameter of the adenomyoma lesions was 4.57 ± 1.21 cm, and the mean weight of the excised lesions was 40.53 ± 35.65 g (range, 15 – 209 g). The mean total operation time was 70.11 ± 15.05 minutes. The mean estimated blood loss was 88.88 ± 20.0 mL (20 – 500 ml) and there was no injury to the adjacent organs or pelvic nerves. No patient received an intraoperative transfusion. Conversion to laparotomy or major complications requiring reoperation was not occurred. At the 7-month follow-up, the main symptoms, including dysmenorrhea and menorrhagia improved. Complete remission of dysmenorrhea and menorrhagia occurred in 97.4% and 88.9% of the patients, respectively.

Conclusion:

Laparoscopic adenomyomectomy using the wedge resection technique could be a safe and effective alternative technique in patents with focal uterine adenomyosis. The surgical indication could be widened and heavy lesion could be included performing wedge laparoscopic resection adenomyomectomy.

024 Laparoscopic Removal of Intra-Abdominal Mislocated Intrauterine Devices: Case Series.

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Objective:

Intrauterine devices (IUDs) are a widely preferred method of contraception due to their effectiveness and safety. However, the use of IUD is also associated with side effects and complications. Uterine perforation is an uncommon complication with an incidence of 1 in 1,000 insertions. IUD perforation can involve adjacent organs (i.e., intestine and bladder) leading to tissue destruction and peritonitis. This paper aims to report cases of intra-abdominal mislocated intrauterine devices.

Methods:

We conducted a case series study consisting of four cases of mislocated IUDs caused by complete uterine perforation at the Mohammad Hoesin General Hospital from February 2022 until February 2023.

Results:

Patients came with pain in the lower abdomen, and a history of IUD insertion. Upon evaluation using transvaginal ultrasound, X-Ray, and CT-Scan, all four patients were found to have intra-abdominal mislocated IUDs. In three cases, devices were found in the peritoneal cavity, enveloped by omentum. In one other case the device had perforated the sigmoid colon. In all four patients, devices were removed using laparoscopic surgery, with minimal complications after surgery.

Conclusion:

Intra-abdominal mislocated IUDs the devices can generally be removed successfully using laparoscopic surgery.

025 A Laparoscopic Salpingo-oophorectomy and Natural Orifice Specimen Extraction (NOSE)-colectomy: in a case of Suspected Colorectal Deep Infiltrating Endometriosis.

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Objective:

To present an experience of laparoscopic salpingo-oophorectomy continued with the natural orifice specimen extraction (NOSE) technique for segmental bowel resection in patients with suspected colorectal endometriosis.

Methods:

A case of a woman with complaint of a sudden twisting in the lower left abdomen, the complaint was not affected by pressure or a change in position. Difficult defecation and farting, with a history of menstrual pain arising especially for three months before admission. Contrast abdominal CT scan was performed showing a narrowing of the colorectal segment. Laparoscopically, a lesion was found on the colorectal segment suspected to be a deep infiltrating endometriosis nodule adherend to the left ovary. The operation continued with as salpingo-oophorectomy and a segmental colorectal resection.

Results:

The specimen was then delivered through a natural orifice (rectum) to provide a minimal post operative pain, improved cosmesis, lowered risk of incisional hernia, shorter recovery and less analgesia required compared to mini-laparotomy for specimen extraction. The anatomic relationship with the rectum, has the advantage to access the abdominal cavity through the latter for specimen extraction in case of resection of a colorectal endometriosis nodule.

Conclusion:

Laparoscopic salpingo-oophorectomy continued by Natural Orifice Specimen Extraction (NOSE)-colectomy for a case of suspected colorectal deep infiltrating endometriosis has several advantages compared to mini-laparotomy. The approach of natural orifice specimen extraction might be a next step in the evolution of minimally invasive surgery.

026 Characteristics of patients undergoing laparoscopic supracervical hysterectomy procedure at Bali Royal Hospital Denpasar in 2020-2022.

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Introduction:

Laparoscopic Assisted Supracervical Hysterectomy (LASH) is a type of hysterectomy that is widely performed worldwide and has a relatively low rate of postoperative complications, less bleeding, shorter length of stay, and faster postoperative recovery.

Methods:

This study is a descriptive study that includes women who underwent laparoscopic hysterectomy procedures at Bali Royal Hospital, Denpasar, Bali during the period of 2020-2022.

Results:

In this study, 44 research subjects were obtained with the majority residing in Denpasar (35 subjects, 79.55%). The majority of patients were under the age of 35 (38.64%) with an average age of 36.6 ± 5.6 years. Patients with a history of one childbirth 29 subjects (65.91%), 2 children for 14 subjects (31.82%), and patients who had never given birth were 8 subjects (18.18%). Based on the body mass index (BMI), the average BMI of patients was 24.2 ± 2.1 with the majority in the BMI range of 18.5-24.9 for 25 subjects (56.82%). The most common preoperative diagnosis was adenomyosis for 22 people (50%), followed by uterine fibroids (13 subjects, 29.55%), abnormal uterine bleeding for (8 subjects, 18.18%), and endometrioma for (1 subjects, 2.27%). The majority of patients (72.73%) did not have any complications during the procedure, but 10 subjects (22.73%) were found to have adhesions. The duration of the operation procedure was 150-200 minutes for 17 subjects (38.64%) with an average of 200 minutes. Bleeding that occurred in 8 subjects (18.18%) was 100 cc, in 20 subjects (45.45%) 150 cc, 14 subjects (31.82%) lost 200 cc, and 2 subjects (4.55%) 250cc. All subjects (100%) were hospitalized for 2 days and none received intensive care.

Conclusion:

LASH in patients with benign gynecological tumours is a relatively easy procedure with few postoperative complications.

027 Laparoscopic Resection of Cesarean Scar Ectopic Pregnancy.

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Introduction:

A 30-year-old with a history of Cesarean section in two previous pregnancies, diagnosed with an 11-week-old pregnancy and presented with a heavy vaginal bleeding. Examination results conclude a diagnosis of blighted ovum. Curettage was done but the gestational sac couldn't be taken out. Ultrasonography results show the pregnancy mass to be implanted at the level of the cesarean scar on the uterine isthmus. The mass dimensions are quite big 4x3x2 cm with active vascularization and a serum level of hCG 2123 mIU/mL. The patient underwent a laparoscopic resection.

Surgical technique:

A uterine manipulator was installed first to facilitate the dissection. A three centimeters incision was made below the umbilicus to insert the primary trocar. Three other incisions were made to insert 3 three secondary trocars. Insufflation was done with CO_2 gas. An exploration of the abdomen and the pelvic cavity was performed, the broad ligament was opened and the right and left uterine arteries were ligated by Endo clips with the help of uterine manipulation. Infiltration of the pregnancy mass was done by injecting vasopressin to minimize bleeding from the uterus. The vesico-uterine space was opened and set aside to find the isthmus. The pregnancy mass was resected from the isthmus by using a harmonic scalpel. The surgery time was 101 minutes with a bleeding of approximately 50 cc. The isthmus was sutured by v-lock and the vesicouterine space

with Monosyn 1 suture. The pregnancy mass was removed through the primary trocar with an endobag. The abdominal cavity was deflated. The trocar incision was sutured layer by layer.

Conclusion:

The laparoscopic approach with excision and repair of the uterine wall represents a safe and efficient therapeutic option for the treatment of the Cesarean scar ectopic pregnancy.

028 Laparoscopic Caesarean Scar Niche Repair: A Case Report.

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Objective:

The incidence rate of Cesarean section (CS) has continued to rise, and has led to many complications. One of the complication is niche, a defect in the CS scar. The niche may be associated with abnormal bleeding. During the next pregnancy, it can cause scar dehiscence, uterine rupture, and an abnormal adherent placenta. Several therapies can be used to treat symptoms related to the niche, such as hysteroscopic niche resection, laparoscopic repair, and vaginal repair. This paper aim to reported niche case managed by laparoscopic resection.

Methods:

We performed a laparoscopic procedure to repair the CS niche, at Blastula IVF Clinic, Siloam Sriwijaya Hospital Palembang.

Results:

A 32 years old women, P2A0, came to our clinic with as main complaint abnormal bleeding. Patient has a history of two CS. The bleeding complaint did appear after the second CS. We found the niche at CS scar when we explored the patient. Then we performed the niche resection by laparoscopy with no complication after procedure.

Conclusion:

In case of niche CS scar, defect can generally be repaired successfully.

029 Complications of Gynecological Laparoscopic Surgeries In Dr. Mohammad Hoesin General Hospital from 2021 to 2022.

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Objective:

Laparoscopy has now become one of the minimally invasive surgeries which is an excellent technique that is increasingly routinely performed in hospitals. Magrina, 2002, stated that in 1,549,360 patients who underwent laparoscopy, the incidence of complications ranged from 0.2 to 10.3%. This study reviews the complications that occur in gynaecological laparoscopic surgeries performed in dr. Mohammad Hoesin General Hospital, Palembang in the period 2021 to 2022.

Methods:

We conducted a descriptive retrospective study in Mohammad Hoesin General Hospital from January 2021 until December 2022.

Results:

During the period from January 2021 to December 2022, 739 gynecological laparoscopic surgeries were performed at the Mohammad Hoesin General Hospital, with a total of nine patients experiencing complications, six of which were trocar site hematomas, two patients had subcutaneous emphysema, and one patient had a posterior uterine perforation.

Conclusion:

Complications of gynecological laparoscopic surgery can occur starting from trocar entry over intra-operative to post-operative. The incidence of laparoscopy in Mohammad Hoesin General Hospital is 1.21%. Although the incidence of laparoscopic complications is rare, it still requires the expertise of the operator and the team to recognize these early and treat promptly and appropriately.

030 A rare case: Idiopathic utero-colon fistula in 50 years old patient and what superior modalities to perform a diagnosis.

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Objectives:

A utero-colon fistula is a rare condition, in this case causes are idiopathic. This case will review and evaluate how diagnosis was made and highlights the role of the healthcare team in managing patients with this condition.

Methods:

This is a case report on a 50-year-old woman with a suspected utero-colon fistula who presented with passing stools from the vagina each time she defecated. Physical examination, fistulograhpy, abdominal CT scan was performed but did not reveal the diagnosis with certainty, diagnostic laparoscopy and hysteroscopy were conducted to confirm the diagnosis.

Results:

Physical examination revealed no abdominal tenderness. Feces were coming out from the vagina. Fistulography from anal to rectum does not show a clearly visible track / fistula associated with the vagina, Abdominal CT showed multiple fistulas from rectum to vagina and suspected a uterus didelphys. A diagnostic Laparoscopy and hysteroscopy were performed and revealed severe adhesions between the sigmoid colon and the right posterior fundus of uterus, the fistula was found on hysteroscopy and it connected the right posterior part of the fundus to the sigmoid colon.

Conclusion:

In cases of utero-colon fistula, despite good imaging modalities, the diagnosis remains challenging. Operative diagnostic procedures (hysteroscopy and laparoscopy) can be superior modalities for diagnosis and management

031 Laparoscopic Repair of Symptomatic Isthmocele Patients: Case Series.

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Objective:

Isthmocele is a common complication after Cesarean section. This condition can result in abnormal uterine bleeding and infertility. Meanwhile, laparoscopic repair of Isthmocele is a minimally invasive technique that has shown promising results in improving clinical outcomes. Herein, we present two patients of laparoscopic repair of isthmocele who presented with abnormal uterine bleeding.

Methods:

The first case is a 27-year-old female with a history of Cesarean section who presented with abnormal uterine bleeding. Transvaginal ultrasound revealed an isthmocele with residual myometrial thickness of 0.11 cm, and laparoscopic repair was performed using a two-layered closure technique. The patient was discharged in three days and reported significant improvement of her symptoms at the first-week follow-up visit. Repeated ultrasound showed complete resolution of the isthmocele within one-month.

The second case is a 27-year-old female who presented with repeated heavy menstrual bleeding following a Cesarean section four-months prior. Isthmocele was identified using both transvaginal ultrasound and hysteroscopy. Transvaginal ultrasound showed a residual myometrial thickness of 0.14 cm and hysteroscopy revealed arterial bleeding through the lesion. Laparoscopic repair was performed using a similar technique to the first case. Similarly, patient's symptoms were resolved at the scheduled follow-up visits and ultrasound examinations showed complete healing of the isthmocele.

Conclusion:

laparoscopic repair of isthmocele is a safe and effective treatment option for patients with abnormal uterine bleeding and a history of Cesarean section. Laparoscopy is a technique that has to be preferred especially if the residual myometrial thickness is <3 mm. It can improve the clinical symptoms among affected women, with minimal morbidity and short hospital stays. Further studies are needed to evaluate the long-term outcomes and cost-effectiveness of this approach in comparison to other modalities.

033 Apical Suspension at Time of Total Laparoscopic Hysterectomy – Should It Be Done? Introducing The REATTACH Study – RCT

Inge Putri

Objective:

To evaluate the effect of prophylactic uterosacral suspension at time of laparoscopic hysterectomy on reducing the risk of developing prolapse in the future.1

Methods:

Primary outcomes: This will be the quantitative point C that will be recorded prior to surgery, immediately post-surgery, and at 6 and 12 months. The relevant change in point C post uterosacral suspension will be measured at each time point. A clinician blinded to the intervention will be performing all the postoperative assessments.
Secondary outcomes: This will be the length of operative time, as well as ascertaining the presence of complications such as rates of urinary retention, urinary tract infection, bladder injury, paraesthesia, changes to sexual function such as dyspareunia. A subjective assessment will also be completed through completion of the PISQ-12 score, as well as the PFDI-20 score. The pre operative and post operative scores will be compared.

Data collection:

The project will be conducted at a tertiary single center through a randomised controlled trial with 2 arms of intervention and control. Intervention arm: patient will undergo high uterosacral suspension at time of total laparoscopic hysterectomy in addition to the routine 2-layer vault closure. Control arm: patients will undergo routine 2-layer vault closure incorporating the uterosacral ligaments. The number of patients needed to be recruited in each arm was calculated to be 33.

Conclusion:

Post hysterectomy vault prolapse is a common issue for women and remain a challenging problem for the pelvic reconstructive surgeons. Given the morbidity and cost involved for surgical repair, we need to focus on the prevention of this condition.

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Section II Vaginal Surgery

O13 Vaginal Natural Orifice Transluminal Endoscopic Surgery(vNOTES) using a double balloon catheter for large benign ovarian cyst.

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Objective:

vNOTES is one of the least invasive and cosmetically advantageous techniques for gynecologic tumours. However, with huge ovarian tumours, there is an intrinsic difficulty in maintaining the operative field as well as the question of how to retrieve the tumour. We experienced one case in which a huge ovarian cystic tumour was retrieved easily using a double balloon catheter.

Methods:

The patient was a 67-year-old G 2 P 2 woman with a BMI of 29.0. The tumour was found during a regular check-up. MRI revealed a bilocular cystic tumour measuring φ13.6×13.8×9.9cm. Tumour markers such as CA19-9、CA125 and HE4 were not increased so we decided to perform a bilateral salpingo-oophorectomy with the aid of vNOTES.

Results:

The tumour was located outside the pelvis due to its size. First, the adnexal ligament was desiccated and divided and then the left ureter was identified. The left Infundibulo Pelvic ligament was desiccated and divided. Although the supporting ligaments were all divided, the tumour was too big to descend to the pelvis. As a result, the tumour was carried into a protection bag in the upper abdomen. The isolation bag was introduced into the vagina and the tumour content was aspirated using a double balloon catheter.

Conclusion:

Huge ovarian cysts are difficult to retrieve when performing vNOTES. One problem is the maintenance of the operative field and another problem is the spillage of tumour cells in the abdominal cavity. In this case we were able to solve these problems with minimally spillage using a double balloon catheter and a protection bag. This is one of the techniques that can be applied for cases of large ovarian tumours where a cosmetically friendly minimally invasive procedure is desired.

Section III General Gynaecology

009 The relationship between lifestyle (Physical Activity, Anxiety, Dietary Diversity) and nutritional status with menstrual patterns of students at SMAN 3 Bandung before and during the COVID-19 pandemic.

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Introduction:

Menstruation is an important indicator in determining the health and fertility status of the female reproductive system, which is regulated by the hypothalamic-pituitary-ovarian axis. The COVID-19 pandemic has an impact on lifestyle, including physical activity, level of anxiety, dietary diversity, nutritional status, and weight changes. Changes in lifestyle and nutritional status have caused disruptions in menstrual patterns, including frequency, duration, regularity, intermenstrual bleeding, blood volume, and menstrual pain. This condition also occurs in female students at SMAN 3 Bandung who are using the Remote Learning System (PJJ).

Purpose:

The purpose of this research is to determine the description and the relationship between physical activity, level of anxiety, dietary diversity, nutritional status, and menstrual patterns of students at SMAN 3 Bandung during the COVID-19 pandemic, which can provide information about changes in lifestyle towards menstrual patterns, eating patterns, and stress occurrences, thus will increase knowledge and awareness in preparing oneself in case of pandemic conditions in the future.

Method:

This is a descriptive analytical comparative study with a cross-sectional approach to 143 out of 185 students from SMAN 3 Bandung who met the inclusion and exclusion criteria. Physical activity data was collected using the IPAQ (International Physical Activity Questionnaire); anxiety level data was collected using the DASS 42 (Depression Anxiety Stress Scale); dietary diversity data was collected using the DDS (Dietary Diversity Score); menstrual data was collected using guidelines from the FIGO (International Federation of Gynecology and Obstetrics) 2018. Menstrual pain was classified according to Speroff's Clinical Gynecologic Endocrinology and Infertility, 9th edition, mild pain is defined as felt for +/- three days 3, while severe pain is defined as felt for >4 days and unable to be reduced by changing positions. Respondents were asked to fill out the questionnaires and had their weight and height measured to calculate Body Mass Index.

Results:

No significant difference was found in the number of female students in aspects of physical activity, stress, dietary diversity, and menstrual patterns before and during the COVID-19 pandemic. No significant correlation was found between nutritional status and menstrual patterns during the COVID-19 pandemic. No significant correlation was found between changes in lifestyle in terms of physical activity and stress, and changes in body weight, with changes in menstrual patterns before and during the COVID-19 pandemic. A significant correlation ($p = 0.074$) was found between changes in lifestyle in terms of dietary diversity and changes in menstrual patterns before and during the COVID-19 pandemic among female students at SMAN 3 Bandung.

Conclusion:

A significant correlation was found between changes in lifestyle in terms of dietary diversity and changes in menstrual patterns among female students at SMAN 3 Bandung before and during the COVID-19 pandemic. Female students with increased dietary diversity tend to have improved menstrual patterns, while those with decreased dietary diversity tend to have worsened menstrual patterns. It is suggested to conduct further research on menstrual patterns with other variables. In addition, for an individual, it is suggested to regularly check reproductive health and maintain a healthy lifestyle during the COVID-19 pandemic.

014 A Systematic Review and Meta-Analysis of Delivery Outcome, Adverse Maternal, and Neonatal Outcomes and in Patients with Endometriosis.

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Objective:

One of the most common gynecological disorders is endometriosis. However, delivery and adverse maternal and neonatal outcomes remain understudied. This study aimed to assess the effect of endometriosis on pregnancy and neonatal outcomes.

Methods:
A systematic search was performed in PubMed, ScienceDirect, and Cochrane using MeSH terms if applicable and in accordance with the PRISMA guidelines, to determine the effects of endometriosis on delivery outcomes which is caesarean delivery (CD), instrumental delivery (ID), and also adverse maternal which was post-partum haemorrhage (PPH) and neonatal outcomes. The Newcastle–Ottawa scale (NOS) was used to assess the risk of bias in this analysis and Review Manager 5.4 to calculate the result of 95% CI for the outcomes.

Results:

A total of 25 studies with 4,243,447 patients were included. Pooled analysis showed patients with endometriosis was associated with an increased rate of CD (OR 1.80, 95% CI 1.20-2.70), increased rate of PPH (OR 1.69, 95% CI 1.28-2.22), increased rate of ID (OR 1.33, 95% CI 1.24-1.43). But interestingly patients with deep endometriosis were significantly more associated with PPH (OR

1.91, 95%CI 1.03-3.54) rather than CD (OR 1.20, 95%CI 0.72-2.02). Patients with endometriosis also significantly associated with premature birth (OR 1.62, 95%CI 1.38–1.90) and lower birthweight (SMD 0.23, 95%CI 0.08-0.38).

Conclusion:

Overall, this study suggests that endometriosis is a significant risk factor for pregnant patients who will come to delivery and may be associated with higher rate of PPH, CD, ID. Pregnant patients with endometriosis may also have premature delivery and low birthweight babies. Since the number of patients with matched baseline characteristics study was still limited, further investigation is still needed to confirm the study results.

015 Fetoscopic Laser Photocoagulation in Twin-to-Twin Transfusion Syndrome (TTTS) at Harapan Kita Women and Children Hospital, Jakarta.

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Introduction:

This study aims to investigate the survival rate of TTTS in Harapan Kita Women and Children Hospital, Jakarta after fetoscopic laser photocoagulation and to compare the survival rate between low and high Quintero staging.

Methods:

All of TTTS cases in the gestational age of 18 to 26 weeks treated with fetoscopic laser photocoagulation in Harapan Kita Women and Children Hospital, Jakarta from the period of 2015 to 2020 were included to this study. The survival rate of fetoscopic laser photocoagulation was measured by perinatal survival; whether one or both twins survived or demised. Samples were classified based on low Quintero stages (II) and high Quintero stages (III and IV) to compare the effect of early to late referral in the outcome of TTTS.

Results:

Among 86 TTTS cases in the 5-year period, the survival rate of at least one twin was 36,05%, both twins were 72,09%, and both fetal demises were 27,91%. Survival rate in one twin and both twin with the low Quintero stages were 80,05% and 58,3, respectively. In the higher Quintero stage group, the survival rate was 66% of at least one twin and 20% of both twins. The result was statistically significant between low and high Quintero stages (p=0,001) in survival of both twins and no significant difference of at least one twin survival (p=0,153).

Conclusion:

Fetoscopic laser photocoagulation increase survival rate in TTTS patients. Low Quintero stages (stage II) showed higher significant survival rate of both twins compared to higher Quintero stages (stage III and IV).

017 Comparative clinical outcome following individualized follitropin alfa and follitropin delta in women undergoing ovarian stimulation for in vitro fertilization.

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Introduction:

Current clinical practice of infertility treatment is moving from standardized to individualized FSH dosing, as new FSH preparations integrate individualized dosing as part of the clinical development. Among the most used regimens, are those using recombinant FSH associated with human menopausal gonadotropin. The aim of this study was to investigate the impact of follitropin delta and follitropin alfa for ovarian stimulation on embryo development and quality in in vitro fertilization cycles.

Methods:

This study uses an analytic observational study with a cross sectional approach to analyze the impact of follitropin delta and follitropin alfa for ovarian stimulation on embryo development and quality in in vitro fertilization cycles who were treated at RSUP Dr. Kariadi Semarang during January 2022 to January 2023. All cycles involved controlled ovarian stimulation using recombinant FSH with gonadotropin-releasing hormone (GnRH) antagonist, long GnRH agonist, or flare GnRH agonist protocols. Inclusion criteria were 16 patient who want to have IVF cycles treated in a fertility clinic, completed laboratory examinations, and subjects would be excluded if not meeting the inclusion criteria. *p* value <0.05 considered significant.

Results:

Total subjects n=16 women; 12 subjects to follitropin alfa and 4 subjects to follitropin delta. The mean value of body weight all subjects was 62,75 ± 8,84 according to each patient's initial AMH level (1,50 ± 1,15). The age mostly less than 35 years (43.8%) subjects. Most of the indications for IVF is endometriosis (43,8%). Mean duration of stimulation was 8,00 ± 3,14. Total dosage of recombinant FSH in follitropin alfa were 1908,83 ± 867,97 while in follitropin delta were 1050,45 ± 857,23; *P*= 0,108. Mean oestradiol level follitropin alfa and delta (1965,60 ± 836,57 vs 1766,6 ± 1156,27) and progesterone 2,11 ± 2,41 vs 6,38 ± 10,85. When analysing the pregnancy rate follitropin alfa and delta were 2 (66,7%) vs 1 (33,3%); *P*= 0.607, higher on the follitropin alfa but it was not statistically significant. Treatment with follitropin alfa and follitropin delta gave different outcomes for mean number of oocytes retrieved (5,50 ± 1,93 vs 11,75 ± 4,99; *P*= 0,002), and different average number of embryos development (1,83 ± 0,72 vs 2,50 ± 0,58; *P*= 0,114). An assessment of the follitropin delta in this trial show a higher number of oocytes and embryo development. This result slightly different from the ESTHER-1 trial showed follitropin delta, with fewer excessive stimulation responses and fewer measures taken to prevent ovarian hyperstimulation syndrome.

Conclusion:

Our findings contribute to the evidence on follitropin delta which resulted in more oocytes and embryo development in follitropin delta. This trial showed that follitropin delta is not inferior to follitropin alfa, and can be a choice for ovarian stimulation for in vitro fertilization.

019 Comparison of Ant-Müllerian Hormone (AMH) levels among stripping and partial excision cystectomy in endometrioma patients.

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Introduction:

Endometrioma is associated with the most advanced stages of endometriosis. Laparoscopic cystectomy usually be the treatment of choice for endometrioma. The optimal treatment for endometrioma patients who desire fertility remains unknown. There are partial and stripping excision of the endometriotic cyst. Impaired ovarian function after surgery can be evaluated by measuring the ovarian reserve. Anti-Mullerian Hormone (AMH) is the only reliable ovarian reserve marker. This study was to compare the effect on AMH levels in endometrioma patients who underwent partial and stripping excision laparoscopic cystectomy.

Materials and Methods:

This prospective analytic study with pre- and post- designs measured the changes of AMH levels on endometrioma patients before surgery, one month and three months after surgery between patients with partial and stripping excision group. The study was conducted at Bali Royal Hospital, Bali from January 2020 to December 2022. Independent Samples t-Test was used to analyse the significant differences.

Results:

A total of 126 patients were included in this study and divided into two groups (partial and stripping excision cystectomy) and the site of endometriosis with mean of age 34.42 ± 7.07 years old. There was a significant difference on AMH levels between patients with partial excision and stripping excision on one month (1.36 ± 0.34 vs 0.91 ± 0.33) and three months (1.73 ± 0.45 vs 1.24 ± 0.36) after surgery ($p<0.000$ and $p<0.000$).

CONCLUSION:

Partial excision cystectomy has lower effect on AMH levels than stripping excision cystectomy in endometrioma patient.

020 Using PAX1 and JAM3 gene methylation detection as a triage tool for cervical cancer screening in women: an analysis of a single-center prospective study. in China.

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Background and Objectives:

Cervical cancer screening is a critical tool in the early diagnosis and treatment of cervical lesions. The primary aim is to detect precancerous or cancerous cervical lesions in women through various screening techniques. Currently, cervical cytology and HPV DNA testing are the most commonly used methods. However, the inherent advantages and limitations of these screening methods have led to more than 30% of CIN2, CIN3, and invasive cancers being indistinguishable through cytology, resulting in clinical overdiagnosis or overuse of colposcopy. Similarly, HPV testing, with its high sensitivity and limited specificity, still cannot differentiate between transient self- limiting infections and those with a risk of progressing to cervical cancer. Therefore, there is a pressing need to develop an objective, easily interpretable, highly sensitive, and specific early screening or adjunctive diagnostic strategy for cervical cancer. Furthermore, this strategy should incorporate new biomarkers and technologies that can be applied in the context of non-invasive or minimally invasive sampling and have the ability to manage the follow-up of CIN2/CIN3 development into invasive cancer. This study aims to investigate the utility of PAX1 and JAM3 gene methylation detection as a triage tool for cervical cancer screening in women through a prospective study.

Methods:

A prospective study was conducted between 2019 and 2022 at the Zhejiang Provincial People's Hospital in China to evaluate the feasibility of opportunistic cervical cancer screening in outpatient settings. A total of 549 participants were enrolled in this study. All participants underwent cervical brush sampling to collect cervical exfoliated cells, and these cells were analysed using liquid-based cytology, HPV testing, and PAX1-JAM3 gene methylation detection (CISPOLY, China) and compared with pathological results. The positivity rate, sensitivity, specificity, and accuracy of all tests were analysed using Epidata 3.1 for data collection and SPSS 18.0 for statistical analysis.

Results:

A total of 549 participants were enrolled in this study. Based on histological diagnosis, the participants included benign abnormalities (n=31), benign/CIN1 (n=321), CIN2 (n=44), CIN3 (n=36), cervical cancer (n=26), postoperative cases (n=28), and other malignant tumours (n=20) across all age groups. Compared to HPV (94.68% and 9.95%) and LBC (89.62% and 45.5%), PAX1-JAM3 dual-gene methylation detection had a sensitivity and specificity of 92.45% and 95.16%, respectively, for CIN2 in all age groups. The methylation performance for CIN3 was 98.39% and 86.78%, respectively. In the population aged 50 years or older, the sensitivity and specificity of dual-gene methylation detection for CIN2 were 100% and 93.98%, respectively, while those of HPV (89.47% and 14.61%) and LBC (91.3% and 54.17%) were lower. The cancer misdiagnosis rates of PAX1-JAM3 dual-gene methylation detection, HPV testing, and LBC were 0%, 5%, and 7%, respectively, across all participants.

Conclusion:

In this single-center prospective study, we investigated the application value of PAX1 and JAM3 gene methylation detection for opportunistic cervical cancer screening in outpatient settings. By comparing the differences in gene methylation expression, HPV testing, and cytology, our data suggests that gene methylation detection has the potential to play an important role in cervical cancer screening among the Chinese population, particularly for patients with CIN2 (or below). In the future, it could be used as an independent biomarker for clinical cervical cancer diagnosis and triage. Therefore, methylation detection, as a new non-invasive diagnostic method, could serve as a screening tool for cervical lesions in women and as a second triage step after initial screening to reduce overtreatment and avoid missing cancer cases without sacrificing the need for colposcopy.

021 Which is more accurate in the diagnosis of high-grade cervical lesions: JAM3/PAX1 methylation or TCT/HPV?

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Objective:

Currently, traditional cervical cancer screening methods, such as HPV testing and TCT, still have limitations. In this study, we explored the clinical value of DNA methylation (ΔCtP:PAX1 and ΔCtJ:JAM3) detection in cervical exfoliated cells for the diagnosis of high-grade cervical lesions, and aimed to identify new diagnostic biomarkers to achieve the goal of "precision screening".

Methods:

A total of 276 patients who underwent gynecological examinations at the Department of Obstetrics and Gynecology at Xiangya Third Hospital of Central South University from August to November 2022 were retrospectively selected. Among them, 242 patients had non-high-grade cervical lesions (control group) and 34 patients had high-grade cervical lesions (study group). The variables studied included general information (age, BMI, menopause status), TCT, HPV, cervical tissue pathology, vaginal examination results, and the ΔCt values of JAM3 and PAX1 gene methylation. Univariate and multivariate logistic regression analyses were used to identify the factors affecting the diagnosis of high-grade cervical lesions, followed by correlation analysis and construction of a conditional inference tree model. The detection efficiency of gene methylation detection for high-grade cervical lesions was also analyzed.

Results:

Univariate and multivariate logistic regression analysis showed that ΔCtP, ΔCtJ, ASCUS, and HPV16 infection were independent risk factors for high-grade cervical lesions ($P<0.05$). Correlation analysis revealed a negative correlation between cervical pathology results and ΔCtP ($r=-0.447$, $P<0.001$) and ΔCtJ ($r=-0.532$, $P<0.001$). The conditional inference tree showed that when ΔCtJ>11.66, 96.4% of patients had non-high-grade cervical lesions, while when ΔCtP>10.97, only 0.9% of patients had high-grade lesions. The combination of ΔCtP, TCT, and HPV had the highest sensitivity (91.2%), positive predictive value (50.0%), negative predictive value (98.6%), and AUC (93.2%) among the six schemes analysed. The detection specificity of this scheme was 87.2%, second only to the specificity of ΔCtJ (88%). The detection efficiency of ΔCtP/ΔCtJ alone was better than that of TCT or HPV alone. The combination of ΔCtJ, TCT, and HPV improved the

sensitivity (88.2% vs. 76.5%) and negative predictive value (98.1% vs. 96.4%) compared with ΔCtJ alone, but did not improve specificity (84.7% vs. 88.0%) or positive predictive value (44.8% vs. 47.3%).

Conclusion:

In this single-center retrospective study, for women with HPV infection, the accuracy of cervical cell DNA methylation detection for high-grade cervical lesions was superior to that of traditional TCT and HPV screening methods. Therefore, it is recommended for use in economically underdeveloped areas or large- scale cervical cancer screening programs. The combination of ΔCtP, TCT, and HPV is the most accurate screening method, but may increase screening costs.

Part Two
Video Presentations

002Vd Cornual Pregnancy on Ipsilateral Side After Right Salpingectomy per Laparoscopy Less Than 6 Months.

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Division Fertilization and Endocrinology Reproduction, Department of Obstetrics and Gynecology, Medical Faculty of Padjadjaran University

Objective:

To report a patient with a natural pregnancy in the ipsilateral horn after a laparoscopic salpingectomy of less than 6 months prior.

Method:

A woman with history of right laparoscopic salpingectomy for right tubal abortion, experienced an ectopic pregnancy less than 6 months later in the ipsilateral horn. The current pregnancy is a natural one. The ß-hCG value was 10,670 mIU/mL. Ultrasound examination found a gestational sac with a heart rate present in the right horn.

Results:

Ectopic pregnancy may occur in the ipsilateral horn even after total salpingectomy. Possible pathophysiology in this case is the presence of risk factors for infertility and previous ectopic pregnancy. A 24-year-old woman with G2P0A1 5-6 weeks pregnant, referred to one private hospital in Bandung, was diagnosed with ectopic pregnancy and complained about right abdominal pain. Clinical examination of the patient showed blood pressure within normal limits, tachycardia, respiratory rate within normal limits, and body temperature within normal limits. Transvaginal ultrasound results showed that the gestational sac was in the right cornu. Laboratory examination were within normal limits. Wedge resection was performed laparoscopically.

Conclusion:

It is important for clinicians to be able to recognize the location of an ectopic pregnancy by ultrasonography and to treat a cornual pregnancy using operative laparoscopy as an option.

003VD Laparoscopic Myomectomy of a large Pedunculated Submucous Leiomyoma in an Unmarried Female – Case Report.

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Cimahi, West Java, Medical Faculty of Padjadjaran University. Indonesia

Objective:

The purpose of this case report is to report an unmarried patient with a pedunculated submucous leiomyoma that was removed by laparoscopic technique

Method:

Patient with a history of recurrent vaginal bleeding who have had a leiomyoma found on ultrasonography and is planned for laparoscopic myomectomy.

Result:

A 40-year-old unmarried female with a history of recurrent vaginal bleeding since two year was diagnosed with a pedunculated submucous leiomyoma, because the patient wanted to preserve the hymen the operation was performed laparoscopically. The mass was pulled into abdominal cavity and the stalk of myoma was excised.

Conclusion:

Laparoscopic myomectomy can be alternative approach for a case of pedunculated submucous leiomyoma in unmarried patient.

Introduction:

Uterine leiomyomas are the most common benign pelvic tumour in females affecting up to 80% of women by the age of 50 (1). Nulliparity increases the risk. The most common symptoms are menstrual irregularity and pressure symptoms (2). The origin of the tertiary classification system is a design for sub- endometrial or submucosal leiomyomas that was originally submitted by Wamsteker et al. and subsequently adopted by the European Society for Human Reproduction and Embryology (ESHRE) (3). Some of the prolapsed pedunculated submucous myomas may belong to the FIGO type 1 or 2 classification, having an intramural component, and cause intraoperative haemorrhage. It is known that hysteroscopy has a high rate of success in controlling bleeding for submucosal myomectomy but the presence of a nascent myoma can make hysteroscopy challenging. There are several non-invasive methods to treat fibroids available now a days. In case recurrence of fibroids or multiple fibroids, the final options are myomectomy to (conserve the uterus for reproduction) or hysterectomy. To decrease the impact of surgery, laparoscopy has also been utilized. Major progress has been made with the introduction of laparoscopic techniques, as proven by randomized trials comparing the various approaches (4). Submucosal fibroids, in particular, lend themselves well to a hysteroscopic surgical approach. Clinicians must determine the location, number, percentage of the fibroids that is located in the uterine cavity, and marital status of the patient. The Wamsteker classification system, used by the European Society of Gynaecological Endoscopy (ESGE), can be helpful in determining the probability of successful removal of submucosal fibroids by hysteroscopic myomectomy (5).
In this case report, we highlight the management for large pedunculated submucous fibroids in an unmarried nulliparous woman who wanted to conserve her fertility.

She was managed by laparoscopic myomectomy.

Case Report:

A 40-year-old Para 0 unmarried female was referred to Department of Obstetrics and Gynecology Cibabat Hospital with a history of abnormal uterine bleeding for two years. There were no complaints of nausea, vomiting, irregular bowel and bladder habits, decreased appetite, and weight reduction. Her age of menarche was 14 years followed by regular periods. There was no sexual activity and the patient was not currently taking oral contraceptives. there was no past medical history of diabetes, bronchial asthma or hypertension. Over the past year, the patient's periods have become significantly heavier, with more and painful cramps, for which she has self-treated with NSAIDs. She went to three different gynaecologists and was given hormonal therapy to overcome her symptoms but she was not getting any better. She also was given three blood transfusions.
On general examination she was in fair general condition, well-built and well-nourished with adequate hydration. There was no pallor, cyanosis, icterus or any significant lymphadenopathy. She had no pedal or sacral oedema. The vital signs were stable. The cardiovascular, respiratory and the central nervous systems were clinically within the normal. abdominal examination revealed no tenderness but there is palpable mass. The liver and the spleen were not palpable.
A pelvic ultrasound done reported an anteverted uterus with a pedunculated fibroid measuring 6 x 5 cm. Both the ovaries were not seen. The haemoglobin was 11.6gms/dl and the urea and electrolytes were normal. Her blood group was B Rh positive. A diagnosis of a large pedunculated uterine fibroid was made and she opted for a laparoscopy with a possible laparotomy, after discussing all the available options.

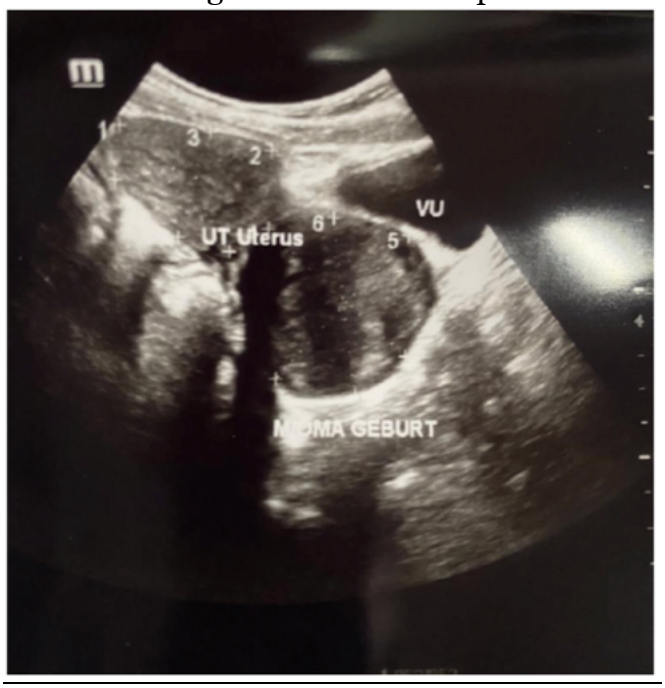

Figure 1. Transvaginal ultrasound results in a patient

A routine pneumoperitoneum was created. At laparoscopy a good view was obtained. The liver and gall bladder appeared normal. Both the ovaries and fallopian tubes were normal. The ovarian fossa, pouch of Douglas and uterosacral ligaments were devoid of any endometriotic lesions. The uterus was normal, but there was a mass that filled the pouch of Douglas suggesting a pedunculated submucous fibroid.

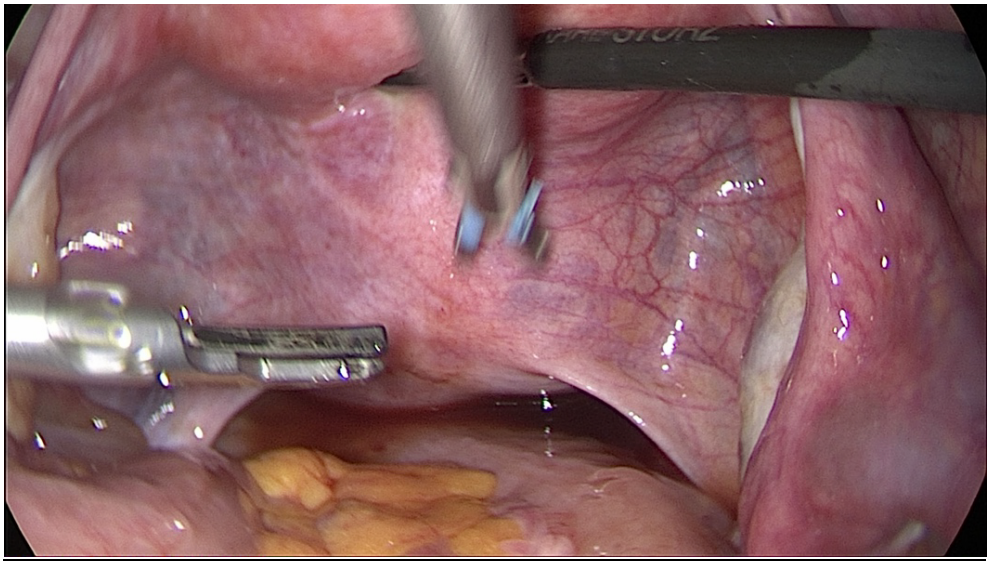

Figure 2. Image of mass before excision

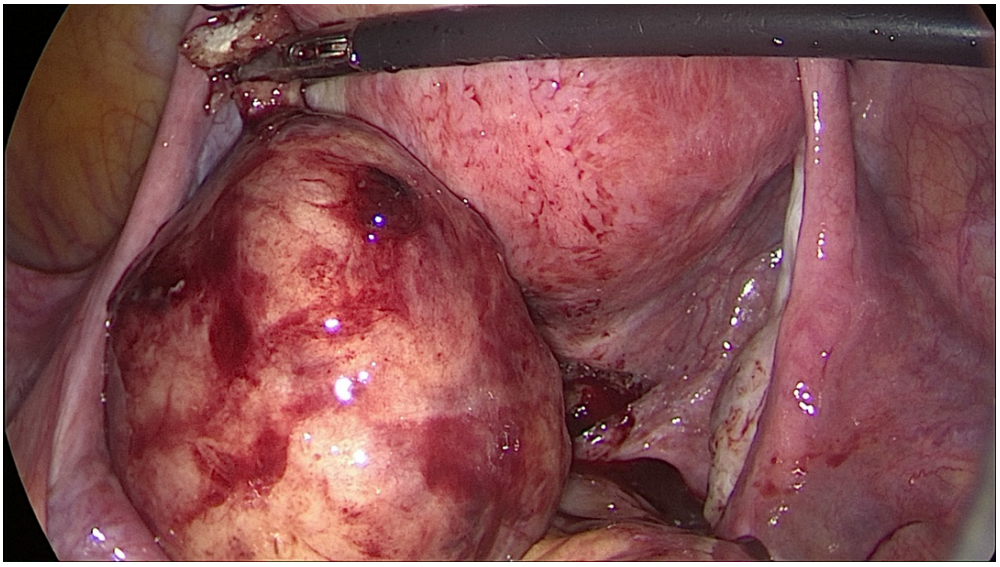

Figure 3. Image of mass after excision

A needle is inserted into the abdominal cavity and fixed in the fundus of the uterus to keep the uterus in anteflexion. An incision was made in the pouch of Douglas to penetrate the vaginal cavity using a harmonic scalpel. Once the vaginal cavity opened, the mass was identified and fixed using a myoma screw and then pulled into the abdominal cavity. The stalk of the myoma is then identified and cut using the harmonic scalpel. The defect was closed in a single layer using intracorporeal sutures. The fibroid was delivered by morcellation. The estimated blood loss was 100 ml. Bilateral ureteric peristalsis was evident. The specimens were sent for histological evaluation, which confirmed a leiomyoma.

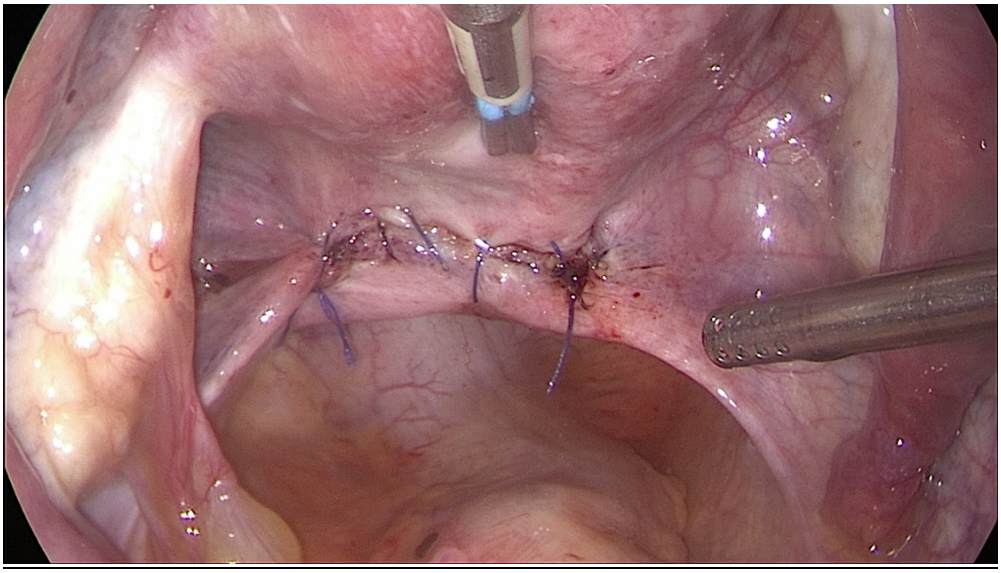

Figure 4. Post excision mass sutures

Discussion:

Leiomyoma is a common uterine pathology, and it is the leading cause of hysterectomy in premenopausal women. Leiomyoma can be subserous, intramural, or submucous. Of all the myomas, 5% are submucous, of which 1.3%–2.5% are pedunculated and have the chance of prolapse. The degree of prolapse outside the uterine cavity is variable. It might be partially prolapsed in the cervix, completely in the vagina, or outside the vagina and the introitus (6). Although many submucosal myomas are operated on using hysteroscopic techniques, this patient is more special because the patient is not married and presents with an unperforated hymen (5).

Laparoscopic myomectomy is a safe and feasible procedure in appropriately selected patients. it is already shown in a series of reports that pregnancy rates between 36 and 65% can be expected following myomectomy done via laparotomy, in infertile women (7). In most cases of large prolapsed fibroids, hysterectomy is a common planned intervention especially if it is a large myoma, and the patient has completed her family and is willing to lose her uterus. Hysterectomy can also be performed as an emergency lifesaving measure if associated with severe haemorrhage or sepsis (with or without uterine inversion), or if myomectomy failed. Our patient wanted to preserve her uterus, and hysterectomy was not acceptable to her unless it was required as an emergency procedure (5).

Intraoperatively, an incision was made in the pouch of Douglas to penetrate the vaginal cavity using a harmonic scalpel. When it entered the vaginal canal, the mass was identified and fixed using a myoma screw then pulled into the abdominal cavity. The stalk of the myoma is then identified and cut using the harmonic scalpel. Challenges to this technique are the difficulty to grasp the myoma with an instrument, and resistance to rotation due to a thick pedicle or impaction. In our case, the myoma was dense enough to be fixed by myoma screw.
In such large myomas, histopathological evaluation is important to exclude sarcomas that may mimic a benign leiomyoma in clinical behavior and macroscopic features (5).

Conclusion:

Uterine fibroids are a significant health issue, negatively affecting a woman's quality of life Because of their bulk and bleeding symptoms. Treatment options range from expectant management to alternative minimally invasive therapies to major surgery. Submucosal fibroids, in particular, lend themselves well to a hysteroscopic surgical approach, but in but in daily practice

we have to look again at the status of each different patient. In patients who are unmarried and have a pedunculated submucous leiomyoma laparoscopic myomectomy may be an alternative therapy.
Our case demonstrated an uneventful removal of a large submucosal leiomyoma using a laparoscopic myomectomy.

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004-VD Laparoscopic Resection of Caesarean Scar Ectopic Pregnancy Following Failed Methotrexate.

Inge Putri

Objective:

The incidence of a scar ectopic pregnancy is ~ 1:2000, rising to about 6% amongst women who have had a previous caesarean section, and the incidence is rising (1)

Methods and Results:

We describe a case report of a 25yo with 2 previous caesarean sections and 2 suction evacuation of retained products with an ultrasound finding of scar ectopic pregnancy, she had B-hCG 104,220, she received intra gestational sac as well as IM methotrexate. Over the next 2 months, her B-hCG was negative, however, she had ongoing PV spotting. She had a repeat ultrasound which showed a 2x2 cm, hypoechoic lesion around C/S scar site. She underwent a laparoscopic excision of scar ectopic pregnancy.

The video highlights key strategies to minimize blood loss:
- Temporary ligature of the uterine arteries with Liga clips
- Temporary ligature of the Infundibulo Pelvic ligament with Liga clips
- Injection of vasopressin into surrounding myometrium

Intraoperatively, a large scar ectopic measuring 4cm was found, wedge resection was performed to minimize myometrial excision, extremely adherent products of conception was removed. Hysterotomy was closed with 2 layers of 2-0 Vloc sutures. A foley's catheter was placed intrauterine and patient placed on oestrogen 4mg daily to encourage healing and prevent adhesions. The patient was discharged home day two following surgery.

Conclusion:

The management of scar ectopic pregnancies remains an ongoing challenge, the administration of methotrexate has a 50% chance of requiring further additional intervention. In this video, we describe steps of a safe excision of scar ectopic pregnancy whilst conserving fertility (2).

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005-VDO Fitz-Hugh-Curtis Syndrome: Release or Not?

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Objective:

Fitz-Hugh-Curtis syndrome (FHCS) is defined by the presence of perihepatic inflammation associated with pelvic inflammatory disease (PID) (1,2). Upper right abdominal pain and tenderness are the most common symptoms that makes patients go to the emergency center (1,3). About 39 million (11% of the global estimate) cases of Sexually Transmitted Infections (STI) and PID occur in South-East Asia in 2012 (4). The treatment of FHCS coincides with PID treatment. Some cases need surgical intervention to release the adhesions (3). Therefore, the authors would like to investigate and discuss this further in order to give some perspective about the FHCS.

Methods:

To achieve a comprehensive review from numerous studies regarding the topic discussed in this review, the authors have explored many resources by using both general web search engines and scientific search engines such as PubMed, ScienceDirect, and other online medical journal search engines. All the articles used in this review have been collected using the keywords "Fitz Hugh Curtis syndrome", "Perihepatic Adhesion", "Pelvic Inflammatory Disease", and "Perihepatic Inflammation'.

Results:

After a comprehensive review, the authors have identified 28 articles five of these were excluded due to confounding and eligibility issues. At the end, the authors reviewed the 23 articles obtained. Fitz-Hugh-Curtis syndrome or FHCS is an inflammation of the liver capsule with adhesion formation resulting in abdominal pain in the right upper quadrant. FHCS Often occurs in women of childbearing age, it's an uncommon disease. FHCS is the chronic manifestation of pelvic inflammatory disease (PID). The adhesion formation doesn't involve the liver parenchyma (3,4). Adhesion formation between anterior liver capsule and anterior abdominal wall or diaphragm is described as 'violin string' adhesion (5,6).

This syndrome was first introduced in 1920 by Carlos Stajano. Curtis (1930) associated the syndrome with PID caused by *Neisseria gonorrhoeae* and Fitz-Hugh, Jr. (1934) correlated it with acute gonococci peritonitis compromising in abdomen (3,7). Although *Neisseria gonorrhoeae* has been considered as a causative microorganism, in recent years *Chlamydia trachomatis* is considered the most frequent cause of FHCS (8). The microorganisms associated with PID spread through either one of three ways: 1) Spontaneous ascending infection where microorganisms from cervix or vagina migrate to the endometrium, then through the fallopian tubes into the peritoneal cavity,
2) Lymphatic spread such as infection of the parametrium from an intrauterine device (IUD), or
3) Hematogenous spread such as tuberculosis infection (3,4,7).

FHCS usually presents as pain in the right upper quadrant (RUQ) of abdomen (9). Its symptoms are also associated symptoms of PID such as fever, lower abdominal pain and vaginal discharge. The quality of RUQ pain is typically sharp, pleuritic and aggravated by movements and frequently referred to the right shoulder or inside of the right arm. The RUQ pain is due to adhesions between the anterior surface of liver and abdominal wall (peritoneum). Symptoms like nausea, vomiting, hiccupping, night sweats, headache, malaise may also be experienced following the RUQ pain, and in rare case with upper left abdominal pain (1,5,10,11).

Diagnosing FHCS may be challenging since its presentation is similar to many diseases with other right upper quadrant abdominal pain (8). It should be diagnosed early and treated empirically to prevent unwanted complications such as infertility and ectopic pregnancy. Physician who suspects FHCS should give more attention on high-risk behaviours and symptoms in the appropriate populations. Some risk factors to consider include age less than 25 years old, first sexual intercourse at age under 15 years, a history of PID, the use of IUD, recent IUD insertions, and vaginal douching. Patient's history such as exposure to a new sexual partner or symptomatic sex partners can give a significant clue (3,12). When RUQ pain occurs in women of childbearing age, clinicians should consider perihepatitis or FHCS (11,13). Although RUQ pain is not always heavy, the intraabdominal disease process is already in progress. The most important criteria in preoperative FHCS are RUQ pain, the presence of PID, and perihepatitis with no involvement of liver parenchyma (8).

Physical examination may find abdominal tenderness and the presence of cervical motion tenderness and vaginal discharge can be helpful for patient suspected with PID (14,15). Murphy's sign may be positive in FHCS patient (16). A friction rub can be heard along the right anterior costal margin in FHCS, described as 'beautiful new snow creaking friction' (10). Physicians should think of the likelihood of PID if the patient that presents any the following symptoms: fever (>38.3^{o}C), abnormal cervical mucopurulent discharge, elevated erythrocyte sedimentation, leucocytosis on saline microscopy of vaginal fluid, elevated C-reactive protein, and laboratory documentation of cervical infection with *Neisseria gonorrhoeae* or *Chlamydia trachomatis* (12,17). Perihepatitis can be distinguished from other causes of RUQ pain by direct visualizing by laparotomy or laparoscopy (1). Visualization of violin-string-like adhesions by laparoscopy is the gold standard for diagnosing FHCS. Diagnostic imaging equipment including ultrasonography (USG), computed tomography (CT) is also being used (14). USG is used to evaluate the gallbladder and the liver, excluding cholelithiasis and cholecystitis, and also to assess tubo-ovarian abnormality as a sign of PID. CT scan with arterial and portal phases can be performed. CT can show the thickening of hepatic capsule and the accumulation of subcapsular fluid (10,18,19). FHCS degrees of adhesion formation include grade I adhesions consisting of violin adhesions which are fragile and friable and can

easily be broken at laparoscopy either by the insufflation of CO2 or by instruments. Grade II adhesions are white fibrous plaques ang very small haemorrhagic spots on the diaphragm and liver surface and grade III are densely fibrotic and vascular adhesions with "*Hanging Liver*" feature. The presence of these adhesions may or may not be accompanied with laparoscopic evidence of PID (15). The therapy of FHCS consist of treating the PID infection, since FHCS emerges from PID. The goals are to relieve the symptoms, eradicate the infection, and minimize or prevent long-term sequelae. In order to clarify the treatment and clinical progress of FHCS, the disease is defined into three groups acute asymptomatic, acute symptomatic, and chronic asymptomatic, then a decision is made concerning the appropriate treatment. Active treatment like adhesion release or adhesiolysis and adequate antibiotics must be used in the acute asymptomatic phase patients who present unclear symptoms and patients with acute symptomatic FHCS accompanied by PID (8). Parenteral or oral regimens both have similar efficacy in treating woman with PID. The gold standard seems to be cefotetan two grams IV every 12 hours or cefoxitin two grams IV every 6 hours with doxycycline 100 mg orally or IV every 12 hours for parenteral treatment, and ceftriaxone 250 mg IM single dose with doxycycline 100 mg orally twice a day for 14 days, with or without metronidazole 500 mg orally twice a day for 14 days oral treatment. Perihepatic adhesion should be lysed by laparoscopy, especially in the acute phase to confirm the diagnosis and relieve RUQ pain secondary to adhesions (6,10,20).
Although there have been no direct reports, we found some complications that can occur when releasing adhesions, including peritoneal injury, liver injury, subcapsular liver haemorrhage due to retraction on a release or overly aggressive technique of adhesiolysis. The best technique to avoid these complications, is the use of sharp on-point dissection, not to perform excessive manoeuvres and retractions, and to prioritize mild adhesions (Grade I-II). In the case patients do complain of RUQ or severe adhesions, adhesiolysis can be carried out in collaboration with digestive surgeons (15).
In a study from Faré (2018), a 23-year-old woman was diagnosed FHCS based on the symptoms and the urine polymerase chain reaction (PCR) test which was positive for *Neisseria gonorrhoeae* and *Chlamydia trachomatis*. The patient was treated with doxycycline and single dose of ceftriaxone with rapid improvement and no relapses at follow-up (21). A different case from Cugliari (2022), a 15-year-old female came to the emergency department with nausea and vomiting for three days and diffuse abdominal pain for two days. The patient was sexually active with two male partners. Laboratory findings were positive for leucocytosis and elevated platelets. At laparoscopic appendectomy, chronic thickening of appendix was seen and confirmed as appendicitis. Small bowel obstruction with multiple bands on the right side of pelvis were released. Adhesions were noted on the right and left lobe of the liver to the abdominal wall and the ileal portion of the small bowel. Adhesions were released and antibiotics cefoxitin, doxycycline, and metronidazole were used postoperatively (22). A study from Hmaidan (2022) reported two patients with FHCS. One patient (FHCS with PID) underwent laparoscopy and the other (FHCS without any pelvic disease) underwent robotic surgery. Both of them did experience the disappearance of the pain by releasing perihepatic adhesions (23). Saurabh (2012) presented FHCS in a 29-year-old African American male. The patient came with history of diarrhoea, right side abdominal pain and abdominal distention. CT scan showed free fluid in pelvis. After the conservative treatment (IV fluid and pain medication), his symptoms remained unchanged. A second CT scan showed mild increase of the free fluid in pelvis. The patient underwent laparoscopic surgery, there were extensive adhesions between liver and anterior abdominal wall. Adhesions were release by electrocautery and Endo Shears. Patient reported complete disappearance of his symptoms (18). A Study from Hong et al. (2010) reported ten cases of FHCS with CT and 101 cases of violin string appearance between the liver surface and the anterior peritoneal wall suggesting perihepatitis at laparoscopy out of 3674 laparoscopies. Among 101 cases, 23 cases were detected during laparoscopy for endometriosis, 16 for gynecological malignant tumours, 16 for benign adnexal disease, 13 for uterine leiomyoma, 7 for PID, 2 for peritoneal tuberculosis and 21 for other gynecological diseases (8). A case report from Abul-Khoudoud (2001) reports a 51-year-old woman with RUQ and epigastric pain, diagnosed with FHCS. Exploration through laparoscopy revealed distention of proximal two-thirds of small bowel and multiple adhesions between the right lobe of liver and the anterior abdominal wall. Mechanical small bowel obstruction did occur secondary to a suprahepatic adhesion at the liver. The adhesions were lysed sharply through five mm right upper quadrant trocar (6).

Conclusion:

Fitz-Hugh-Curtis syndrome (FHCS) is chronic manifestation of pelvic inflammatory disease (PID), which presents right upper quadrant (RUQ) abdominal pain as a result of perihepatic adhesion formation between the anterior surface of the liver and the abdominal wall. *Neisseria gonorrhoeae* and *Chlamydia trachomatis* are the most causative bacteria for PID that leads to FHCS. The treatment of FHCS goes parallel with PID. When FHCS diagnosis is confirmed by laparoscopy, surgeon should decide to release the adhesions or not and then initiate empiric antibiotic treatment. Adhesiolysis or releasing perihepatic adhesions is performed by done by laparoscopic surgery. Whenever feasible, we can consider to perform adhesiolysis especially when the patient is complaining of RUQ pain, the adhesion is mild (FHCS grade I-II), and the surgeon is confident in her/his skills to release the adhesion. But when the risk outweighs the benefit, in case the adhesion is severe and a high probability of complication like liver subcapsular haemorrhage exists, we can reconsider to release the adhesion or plan a collaboration with the digestive surgeon. There is a need for more reports about FHCS to decide on adhesiolysis. Still, releasing the adhesion and appropriate antibiotic therapy are needed to prevent recurrent adhesion and complications in the future.

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006-VDO Hysteroscopic Release of Intrauterine Adhesion and Amniotic Membrane Transplantation in a Patient with Recurrent Amenorrhea due to Intra Uterine Adhesion (IUA).

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Objective:

To describe a case of amenorrhea due to Intra Uterine Adhesion (IUA) that already underwent two times an operative hysteroscopy, the last hysteroscopy was in conjunction with amniotic membrane transplantation technique to improve endometrial growth.

Method:

Report of one case

Result:

Mrs. K, 33 years old, with primary infertility eight years, the main complaint was secondary amenorrhea for three years. The patient first came to visit in 2021 due to an amenorrhea of one year, a history of curettage, three years before the visit, due to suspected endometrial hyperplasia (no pathology report). In 2021 the patient underwent a diagnostic hysteroscopy, there was a cervical stenosis and uterine synechiae, a transcervical resection of the endometrial adhesion (TCRA) was performed using Hegar dilators under ultrasonic guidance, after that, we took an endometrial biopsy and an intrauterine device (IUD) was placed, patient was given cycloprogynova for three months, the pathology report was chronic endocervititis. The patient was lost to follow up, until 2023. She came again due to an amenorrhea of six months. She told that in 2021, three months after taking cycloprogynova, she did visit another gynaecologist, the IUD was removed and she was given oral contraception/OCP, and she did experience spotted menstruation, but when she stopped the OCP, she no longer had menstrual periods. In 2023, a hysteroscopy was performed, the uterine cavity was opened, the endometrial layer was thin, and there were filmy adhesions at the fundus, and some endometrial polyp at the cornu. A polypectomy was performed and the synechia was released in conjunction with an amniotic membrane transplantation. Patient was advised to take progynova 2x2 mg this regimen did cause scanty menstruations, then cycloprogynova was prescribed. A diagnostic hysteroscopy was planned three months after the last one.

Conclusion:

The current traditional management of severe intrauterine adhesions (IUA) is hysteroscopic adhesiolysis with application of either an intrauterine contraceptive device or a Foley catheter balloon with reported recurrence in up to 50% of cases. Recently, there are some study discussing the use of amniotic membrane graft after hysteroscopic lysis of severe IUA, and some study reported the significant improvement in the volume of menstruation, and the severity of intrauterine adhesions. The amnion seems to supress the endometrial adhesion formation and to promote endometrial regeneration.

007-VDO The Use of Epinephrine During Laparoscopic Myomectomy, Is It Safe?

Lestari Kartika

Nunukan Hospital, North Kalimantan, Indonesia.

Objective:

To describe a case of laparoscopic myomectomy using Epinephrine as vasoconstrictor in order to reduce blood loss, there was an increase in blood pressure, soon after the injection, but fortunately this was managed by anesthesiologist without any complications.

Method: Report of one case

Result:

Mrs S, 33 years old, primary infertility of one and a half year, as main complaint and lower abdominal discomfort. Physical examination, BMI 22 kg/m2, no history of operations. On vaginal examination, the uterus was slightly enlarged, a myoma was palpated at the left the uterine corpus. Transvaginal ultrasound revealed a 4,5 cm x 4,3 cm fibroid at the left anterior side of the uterus. I performed a laparoscopic myomectomy, using a uterine manipulator and three accessory trocar ports, epinephrine was used as haemostatic agent. 1 cc epinephrine was diluted in 200cc NaCl 0.9%, 40 cc of solution was injected in the myoma capsule. Apart from being a hemostatic agent, this solution also useful as a hydro dissection that separates the myoma tissue from the normal myometrial tissue. Soon after the injection an increased blood pressure was observed, immediately treated by the anesthesiologist in less than 5 minutes. After the injection, I could perform the enucleation of the myoma easily, total blood loss was 50 cc, and the duration of the operation was shortened.

Conclusion:

There are several ways to reduce the amount of bleeding during a laparoscopic myomectomy. These include tourniquets, the use of vasoconstrictor agents, and a temporary uterine artery ligation. The most preferred vasoconstrictor agent is vasopressin, apart from its more local action, it also has a shorter half-life than epinephrine. However, in some remote areas, vasopressin is difficult to obtain, so the use of epinephrine is an option. Based on this case, the use of intramyometrial application of epinephrine seems to be safe but leads to significant alterations of the hemodynamic parameters, whereas the use of a tourniquet requires high skills, risk of hematoma and longer duration of surgery. So, a good teamwork, especially with anesthesiology is the main key to overcome the hemodynamic disturbances from epinephrine.

008 VDO Variasi Teknik Laparoskopi *Shoelace Knot* Arteri Uterina Bilateral pada Mioma yang Menutupi Rongga Pelvis.

dr. Arry Soryadharma, Sp.OG

dr. Nogi Eko Prasetyo., Sp.OG., Subsp F.E.R

Not available in English.

009-VDO Removal of Myomas Through the Vagina in Laparoscopic Surgery: A Case report.

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Introduction:

A 36-year-old woman with as main complaint secondary infertility for six years, currently the patient still menstruates regularly every month but accompanied by pain. The patient changes pads 2-3 times every day during menstruation. Gynaecological examination and transabdominal ultrasound show a uterine myoma with a diameter of 6.9 x 2.8 x 4.8 cm and ultrasound shows a whorl like, spiral shape, pattern with a ring of fire. The patient is planned for laparoscopic myomectomy.

Surgical Technique:

A total of 4 incisions were made for the insertion of one primary trocar and three secondary trocars. The manipulator was installed and then CO_2 gas insufflated into the abdominal cavity. All of the trocars were put in directly into the abdominal cavity. After the myoma was identified, vasopressin infiltration of 1:100,000 IU around the lump was performed. Once the correct plane was entered, the myoma was dissected out of the uterus with the harmonic scalpel. The uterus bed was closed in single layers with barbed sutures and the myoma then removed through an incision of the posterior fornix. The largest spark plug guides are installed vaginally and pushed to make the posterior fornix protrude. The vagina is opened slowly from the abdominal side using harmonic scalpel until the opening is wide enough. The myoma is then pushed through this opening and identified through the vagina then pulled slowly using a Kocher or a tenaculum. The vaginal mucosa is sutured with an absorbable thread 2.0 laparoscopically.

Conclusion:

The morcellator is indeed an instrument that greatly facilitates the removal of myomas from the abdominal cavity. However, this instrument has a disadvantage. The procedure cannot deal with blood vessels thus makes it difficult in cases of vascular cauterization and techniques are limited to Type II myoma. This procedure has a risk of spreading cancer cells in the peritoneal cavity. The morcellator is still an option in cases of large myoma (larger than duck's egg) and cases of attachment to the pouch of Douglas. Another variation of the technique to minimize the spread of cancer cells is a vaginal hysterectomy. This method removes myomas by opening the posterior fornix into the birth canal. This method has the advantage of an leaving an unseen scar and minimizing the spread of cancer cells.

010-VDO Total Laparoscopy Retrograde Hysterectomy on Frozen Pelvis due to Severe Endometriosis: is it feasible and safe?

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Objective:

This study aims to evaluate the feasibility and safety of total laparoscopy retrograde hysterectomy on frozen pelvis due to severe endometriosis.

Material and Methods:

This study was conducted retrospectively with a case-series observational study design. Sixteen endometriosis patients with grade IV classified based on revised-American Society for Reproductive Medicine classification who underwent total laparoscopic retrograde hysterectomy at Fatmawati Hospital-Jakarta from 2019 to 2022 were included in this study. Physical examination and transvaginal ultrasound were performed on all patients before surgery. Symptoms, a transvaginal ultrasound examination, and postoperative pathology results confirmed the diagnosis of endometriosis. Some data were collected, such as patient characteristics, history of symptoms, previous surgery, intraoperative and postoperative results.

Results:

Sixteen patients with severe endometriosis at Fatmawati Hospital-Jakarta were included in this study. The mean age of the patients in this study was 42.75 (± 4.2) years. In this study, four patients had a history of one surgery (25%), two patients had a history two surgeries (12.5%), and ten patients (62.5%) had no history of previous surgery. Some of operations that patients in this study had undergone were caesarean section (12.5%), cystectomy (18.8%), and salpingo-oophorectomy (6.3%). Most patients experienced dysmenorrhea (93.8%), and only a small proportion experienced abnormal uterine bleeding (18.8%), dyspareunia (12.5%), and chronic pelvic pain (12.5%). Eleven patients (68.8%) had endometriotic cysts accompanied by deep infiltrating endometriosis (DE), two patients (12.5%) had only an endometroid cyst, and three patients (18.7%) had DE, the average size of endometrioma was 5.8 cm (± 2.96 cm). Besides endometrioma lesions, the patients had other abnormal findings, thirteen patients (81.3%) with adenomyosis with an average size of 4.29 cm (± 2.72 cm), three patients (18.8%) with hydrosalpinx, two patients (12.5%) with uterine fibroids, two patients with hydronephrosis (12.5%), one patient with a combination of cholelithiasis (6.3%) and nephrolithiasis (6.3%). Total laparoscopic retrograde hysterectomy was performed in all sixteen patients with frozen pelvis due to severe endometriosis, and concomitantly performed were bilateral salpingo-oophorectomy in thirteen patients (81.3%), unilateral salpingo-oophorectomy in two patients (12.5%), DIE resection in six patients (37.5%), ureterolysis in three patients (18.8%), and ureteroscopy with DJ stent insertion in one patient (6.3%). The average operating time was 4.27 hours (± 1.09), and the average length of stay was five days (± 3.25 days). The average estimated blood loss was 180 (80-500) cc, with two patients (12.5%) requiring blood transfusions. There were no conversions to laparotomy. Perioperative complications occurred in one patient (6.3%), having an ureterovaginal fistula. One patient (6.3%) was observed postoperatively in the intensive care unit for one day.

Conclusion: From this study, total laparoscopic retrograde hysterectomy with adhesiolysis is a safe and feasible surgical technique for severe endometriosis with severe adhesions. This is due to the low intraoperative bleeding rate, laparotomy conversion rate, intraoperative and postoperative complication rates.

011-VDO Immersion Procedure in Laparoscopic Surgery for Endometrioma Cystectomy new cystectomy technique to make it easier and no bleeding.

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Objective:

Efforts that are always carried out in endoscopic surgery, especially endometrioma cystectomy, are looking for ways to exfoliate the walls of endometrioma cysts to cause minimal bleeding or no bleeding at all. Because the hilus area is formed by connective tissue it is difficult to separate the

layers of the cyst wall, it is often necessary to cut the cyst wall around the hilus to reduce the risk of bleeding from the hilus.

Materials and Methods:

The basis of the endometrioma immersion procedure is to allow osmosis to occur in the ovarian tissue and endometrioma wall. The process of osmosis refers to the movement of H2O molecules and is a passive process because it does not require energy and occurs automatically. In the process of osmosis, H2O molecules move from areas or tissues with a lower concentration (hypotonic) to tissues with a higher concentration (hypertonic) through a semipermeable membrane until an equilibrium is reached or approaches the osmotic pressure balance in each layer.
The liquid used as irrigation can be in the form of sterile aqua or 0.9% NaCl, both of which contain H2O molecules. This fluid acts as an extracellular environment that has a low/hypotonic osmolarity. Endometrioma wall cells and ovarian tissue cells (stromal and cortex) that surround them act as a semi-permeable membrane and have a higher osmotic pressure.
Immersion or soaking is done for 15 to 20 minutes. During this time period, osmosis is expected to occur. During the process of osmosis, H2O molecules from irrigation fluid will enter the cells in all layers of ovarian tissue and endometrioma wall, then these cells will swell and cause the bonds between tissues to become looser.

Immersion procedure:

The surgeon performs an incision in the wall of the endometrioma using a harmonic scalpel on a thin, avascular wall section. Endometrioma fluid is suctioned until the endometrioma is empty or the suction is completed. The irrigation fluid is brought into the now empty cyst, until it is filled at capacity, and also into the pouch of Douglas. The endometrioma now contains irrigation fluid and is submerged in irrigation fluid in the pouch of Douglas. The cyst is left soaking for 15 - 20 minutes. The duration of immersion depends on the thickness of the cystic wall and the ovarian tissue that covers the cyst, and depends on how soft and hard the cyst wall is. After the osmosis process (15-20 minutes), the irrigation fluid is aspirated. Followed by exfoliating the cyst wall/stripping. This procedure makes the peeling process easier because the two layers of connective tissue are looser, there is very little bleeding, often there is no bleeding at all, and the cyst wall can be removed up to the hilus area.

Results:

We have performed cystectomy with immersion procedure since 2017 at Kariadi Hospital (Semarang-Indonesia). Of the 60 endometrioma cases that underwent cystectomy with this immersion technique, approximately 90% did not have a bleeding that required cautery or ligation and in almost all of the subjects the cystic wall was taken out up to the hilus. There was no observed bleeding from the hilus or cyst bed.

012-VDO The effect of temporary uterine artery ligation with Endo clip on laparoscopic myomectomy to reduce intraoperative blood loss.

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Introduction:

A 31-year-old P2A0 woman came to the hospital with heavy menstrual bleeding, referred with a uterine myoma. She denied any weight loss or any changes in defecating and urinating. The transabdominal ultrasonography showed uterus with a spiral like pattern tumour measuring 4.6 × 2.65 cm, and a ring of fire was found. The patient underwent laparoscopic myomectomy where Endo clips were used to temporary ligate the uterine artery to reduce intraoperative blood loss**.**

Surgical Technique:

An umbilical trocar and three lower abdomen trocars were placed in the abdomen. Two litters of CO2 gas was entered, and the abdominal and pelvic cavities were observed. The uterus was seen to be enlarged, with normal adnexae. The retroperitoneal trigonum (external iliac artery-infundibulo pelvic ligament- round ligament) was identified and opened. The uterine artery was identified guided by the obliterated umbilical artery, the latter is located at the distal end of hypogastric artery. The uterine artery is then clipped with titanium Endo clip. The same procedure is performed contralaterally. Myomectomy is then completed by dissecting the mass after opening the posterior wall of the uterus using a Harmonic scalpel. The reconstruction of the uterus was done using barbed sutures (v-lock), finally the fibroid is morcellated. The clips are then removed using a forceps. The total operation time is 50 minutes, total bleeding 50 cc, no active bleeding was seen. The incisions were closed layer by layer by sutures.

Conclusion:

Temporary ligation of uterine artery using Endo clips is a simple technique and could be an option to reduce intraoperative blood loss volume on laparoscopic myomectomy.
A uterine myoma enucleating by laparoscopy using Endo clips temporary artery ligation technique can reduce the operative time, lower risk of injury to the surrounding tissues and it is easy and quick to perform the application of the Endo clips on uterine artery.

011 Secondary Amenorrhea due to Female Genital Tuberculosis.

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Objective:

To Report a case of secondary amenorrhea related or caused by female genital tuberculosis and a minimal invasive surgery protocol for diagnosis and therapy.

Method:

This is a video case presentation of 24 years old woman who experienced two years of infertility and three years of amenorrhea. The subject has also a history of abdominal tuberculosis 10 years before admission with incomplete tuberculosis therapy. Because there is a suspicion of recurrent abdominal tuberculosis, the Interferon Gamma (IGRA) examination was performed to exclude tuberculosis.

Results:

Female genital tuberculosis is a secondary disease resulting from a primary tuberculosis Infection. The spread of tuberculosis can be hematogenous or lymphogenous. The disease itself is often hard to diagnose. The biomolecular testing also has a low sensitivity and specificity for the diagnosis of female genital tuberculosis. In the case at hand a diagnostic hysteroscopy and laparoscopy were performed. Surgical finding included a pale endometrium and intrauterine adhesions at hysteroscopy and at laparoscopy a Hugh-Fitz-Curtis syndrome and Sharma's hanging gallbladder sign. The patient then had a bilateral salpingectomy and intrauterine adhesiolysis. Histopathological results did reveal endometrial tuberculosis and bilateral non-specific chronic salpingitis.

Conclusion:

Thorough anamnesis and examination should be performed in diagnosing female genital tuberculosis because many variables are low in sensitivity and specificity.

032 Direct Insertion and Digital Dilation: A Novel Entry Technique in SILS.

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Background:

Since the introduction laparoscopy, Single Incision Laparoscopic Surgery (SILS) has gained its popularity as the least invasive treatment for gynecologic conditions. In recent times, a multichannel port is placed in the umbilicus for instrument access. This port is inserted using the open technique, where the multiple layers of abdominal wall are incised and dissected. Although open technique is commonly used for its safety, it requires many surgical instruments and takes a longer time than any other entry method.

Aim: This study aims to create a newer technique that overcome the complexity from previous entry techniques.

Method:

This is a descriptive study with a video showing the Novel Entry Technique step-by-step.

Discussion:

Our entry technique starts making a 15-20 mm skin-deep incision made at the inferior border of the umbilicus, extending laterally. A 12-mm trocar is then inserted through the direct entry method. After ensuring that the trocar has reached the peritoneal cavity, gas insufflation is performed to establish a pneumoperitoneum. The initial trocar is then removed whereafter a digital blunt dissection is performed. The multichannel port is then gently inserted in place. The time lapse from initial skin incision to port entry was approximately 4 to 6 minutes, utilizing a minimum of surgical equipment.

Conclusion:

Compared to the conventional open technique, this method provides faster time from skin incision to port entry and requires less surgical instruments with a smaller incision site – making it a more efficient technique of multichannel port insertion.

Part Three

Posters

001-PSTR Diagnostic Laparoscopy in Herlyn-Werner-Wunderlich (HWW) syndrome: A case series.

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Introduction:

The Herlyn-Werner-Wunderlich (HWW) syndrome is a rare congenital anomaly involving Müllerian (paramesonephric) and mesonephric ducts characterized by the triad of uterus didelphys, unilateral obstructed hemi-vagina and ipsilateral renal agenesis, also known as OHVIRA. Clinical suspicion and early diagnosis are crucial in providing a timely treatment to prevent complications. Diagnostic laparoscopy is indicated when radiological imaging is inconclusive and for treatment of concomitant conditions or complications.

Objective:

To report four different cases of Herlyn-Werner-Wunderlich (HWW) syndrome in which laparoscopy was performed due to suspected presence of complications.

Methods:

A retrospective case series of HWW syndrome at our hospital during 2019-2021. Data were obtained from medical records, including general patient information, history of disease, surgical procedures, and outcomes. Surgical procedures consisted of laparoscopy and vaginal septum resection (septectomy).

Results:

We report four cases of HWW syndrome in which diagnostic laparoscopy is performed due to suspected presence of complications. Laparoscopy was able to detect complications in all the four cases, including hematocolpos, adhesions, endometriosis, and hematosalpinx, some of which were not detected by imaging. These complications were managed during laparoscopy, namely drainage

of hematocolpos, adhesiolysis, removal of endometriosis, and salpingostomy. On follow-up visits, patients reported regular menstruation without any pain and no complications.

Conclusion:

Prompt and accurate diagnosis is important to provide early treatment, prevent complications of HWW syndrome, and preserve future fertility. Despite being considered as the most accurate imaging method, MRI has also been demonstrated to have significant discrepancies with diagnostic laparoscopy in complicated cases of HWW syndrome. In such cases, laparoscopy can be both diagnostic and therapeutic. Laparoscopy is able to clarify the pelvic anatomy, detect presence of complications, and become a therapeutic approach for complications. Laparoscopy should be considered the gold standard for complete evaluation of HWW syndrome and be reserved for cases of HWW syndrome with suspected presence of complications.

002-PSTR Struma Ovarii: A case report of a rare ovarian mass.

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Struma ovarii is a rare type of ovarian mass that has a predominance of thyroid tissue. In most cases, it is benign and accounts for about 2.7% of teratoma. Most patients are asymptomatic and, it is rarely diagnosed before surgery and is often diagnosed histologically after surgery. We would like to report a case related to struma ovarii. A 16-years-old patient was referred for abdominal distension and intermittent abdominal pain. Computed Tomography (CT) scan showed a 21 x 14 cm sized huge multi-chambers cystic mass arising from a left ovary with different attenuation at each chamber. The serum tumour marker CA-125 was considerably increased. A laparoscopic Left ovary cystectomy was performed. The mass contains mucinous fluid. Patient had an uncomplicated postoperative course. Prior to the surgery the mass was speculated to be a mucinous cystadenoma. However, histopathology showed thyroid tissue, confirming the diagnosis of Struma ovarii. All components of the solid portion consisted of thyroid tissue, and some thyroid follicles were identified between the fibrotic tissues in the cystic wall. Postoperative thyroid function test was normal. Looking at previous studies, it is reported that struma ovarii has a higher rate of benign cases and that fertility conserving management can be implemented. Clinical hyperthyroidism is associated in 5-8%, and malignant cases are associated with papillary and follicular thyroid cancer. Additionally, there was a case in which struma ovarii was later found in a patient with thyrotoxicosis. In the present case, the TFT was in the normal range. In conclusion, although it is a rare form, diagnosis of struma ovarii should be considered when evaluating and treating the ovarian masses.

003-PSTR Fallopian Tube Recanalization (FTR) Outcome in Bilateral Non-Patent Tubes at Dr. Moewardi Hospital Surakarta: Case Series.

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Introduction:

Tubal obstruction is one of the common causes of female infertility and almost always in need of artificial reproductive technology. Anatomical improvement of the tubes using surgical procedures are expected to restore their function. However, it increases the risks, cost, and morbidity. Previous studies show good technical success rates for fallopian tube recanalization (FTR) using minimally invasive transcervical tubal catheterization.

Objective:

To report the outcome of three cases of infertility due to bilateral non-patent tubes after performing FTR.

Method:

We retrospectively evaluated three cases of FTR procedures performed from July to November 2022 at Dr. Moewardi Hospital. The three cases had undergone a basic infertility evaluation with the final diagnosis: infertility due to bilateral non-patent tubes. Infertility due to anovulatory and male factor were excluded. Minimally invasive transcervical tubal catheterization-hysterosalpingography with high pressure contrast injection followed by fluoroscopy were performed. The success of the technique was confirmed if both tubes were patent at the end of the procedure. Clinical pregnancy was confirmed if a gestational sac was seen at transvaginal sonographic examination within 12 weeks post-procedure.

Result:

Case-1 with five years primary infertility: the technique was successful but patient did not get pregnant. Case-2 with one-year primary infertility: the technique was successful and a spontaneous

pregnancy did occur eight weeks after the procedure. Case-3 with a five years secondary infertility: the technique was successful, but patient did not get pregnant.

Conclusion:

There were three technical successes in the three cases that underwent FTR, one of which became pregnant.

004-PSTR Successful Pregnancy after RFA treatment in Cases of Intramural Myoma Type 3 in IVF Program.

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Introduction:

Uterine myomas are non-cancerous tumors that most often appear during the reproductive years. Myomas have a high prevalence and may be a cause of infertility. The study about the effect of myomas being constrained within the wall of the uterus known as intramural fibroids on implantation is still limited. Intramural fibroids that distort the endometrial cavity are associated with reduced implantation rate following IVF treatment. There are no medical procedures for myoma removal, except myomectomy, which is widely acknowledged to be suitable for long-term fertility. Ultrasound-guided uterine myoma ablation therapy has been proven to be effective, less invasive than other modalities, and has minimal adverse effects, therefore it may be the best procedure approach. There have been no previous reports of pregnancy after laparoscopic, transcervical, or transvaginal radiofrequency ablation of fibroids in Indonesia.

Case report:

We present the outcomes of the first viable pregnancy after a transvaginal ultrasonography-guided radiofrequency ablation of intramural myomas in an IVF program. A 33-year-old gravida 1, para 0 female requested treatment for dysmenorrhea of uterine fibroids and had future pregnancy wish. She had a history of being married for four years and had uterine cysts. Transvaginal ultrasonography revealed an anteromedial type 3 myoma measuring 3,1x 3,2 x 3,0 cm with a volume of 17,30 cm^3. The patient had previously undergone a laparoscopic cystectomy and salpingectomy.

005-PSTR Successful Management of Extrauterine IUD Translocation.

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Background:
Intrauterine devices are the most commonly used long term contraception in Indonesia. This is due to their 98-99% effectiveness in preventing pregnancy. However, frequent use of IUD's is associated with complications such as IUD translocation. The prevalence of IUD translocation is 1,3/1000 these mainly occur during insertion. Extrauterine IUD translocation may further cause chronic pelvic

pain, perforation of bladder or intestines, intestinal obstruction, abscess, adhesions, fistula formation, and undesired pregnancy. Therefore, removal of extrauterine IUD translocation is recommended.

Objective:
The aim of this study is to describe the effective management of extrauterine IUD translocation.

Methods:
We report a case of patient who underwent laparoscopic removal of an extrauterine IUD on January 30th 2022 in the Obstetrics and Gynecology Department of the Fatmawati National Hospital Jakarta.

Results:
A 22-year-old G1P1 woman complained of chronic pelvic pain (VAS 4) for two weeks before admission. The patient had a history of spontaneous labor two month earlier and then had an IUD insertion in the puerperal period. On transvaginal US examination, the IUD was not visible in the uterine cavity but in the pelvic cavity a hyperechoic elongated structure was seen suspicious of an extrauterine IUD location. Diagnostic hysteroscopy was performed followed by laparoscopy. On hysteroscopic view there were no IUD or IUD threads visible in the uterine cavity. Laparoscopy showed that the IUD string was attached to the omentum and the IUD rods imbedded in the anterior peritoneum. The uterus and both adnexa were normal. Adhesiolysis was performed between the omentum and the anterior peritoneal wall until the IUD could be completely removed. The IUD and omentum then were removed from abdominal cavity. One day postoperatively, the patient was in good condition and was discharged.

Conclusion :
Extrauterine IUD translocation is rare complication of the IUD insertion. Laparoscopic removal is the procedure of choice which has proven to be highly successful in the removal of IUD translocations.

006-PSTR Scoping Review of High-Intensity Focused Ultrasound (HIFU) Procedure in Adenomyosis.

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Introduction:
Adenomyosis is a gynecological disease characterized by ectopic endometrial tissue in the myometrium which often occurs in women of reproductive age, between 30-40 years. The prevalence of adenomyosis currently ranges from 20-35%. The patient's main clinical symptoms include abnormal uterine bleeding, menstrual pain (dysmenorrhea), and impaired fertility (infertility). The pathological mechanism for the occurrence of adenomyosis is an imbalance of steroid hormones, a local inflammatory process that causes changes in cell proliferation which may lead to neuro angiogenesis in myometrial tissue (1,4). Current therapy for adenomyosis includes oral medications, progesterone, contraceptive pills or anti-inflammatory pills as well as GnRH Agonist injections and adenomyomectomy that can be performed by conducting minimally invasive

laparoscopic surgery/laparotomy surgery (5). Surgical removal of the uterus (hysterectomy) is the main option for women who no longer want children, but hysterectomy for adenomyosis that occurs in infertile couples is not a good choice for women who still want children. Although UEA treatment can improve patient symptoms, its effect on ovarian function and pregnancy is still uncertain (4,5).

High Intensity Focused Ultrasound (HIFU), an emerging non-invasive surgical technique for the treatment of benign tumors, has been used for adenomyosis since 2008. Under ultrasound or magnetic resonance (MRI) examination, HIFU high intensity ultrasound energy can penetrate the abnormal target tissue and remove the lesion through thermal effects and cavitation and allows the preservation of normal tissue around the lesion. The cavitation process is a condition in which HIFU will create static pressure on the targeted cells so that the liquid in the cells decreases until it is under the pressure of liquid vapor, which results in the formation of bubbles filled with small vapor bubbles in the liquid. The bubble eventually explodes and the liberated gas passes into the surrounding liquid through a mechanism that initially softens and then gets absorbed by healthy body tissue.

In recent years, HIFU therapy has become a viable surgical alternative for patients who still wish to retain their uterus. However, adenomyosis is a disease that is very sensitive to the estrogen hormone, and HIFU therapy will not change the working of hormones in the body. The risk of recurrence therefore still exists. Gonadotrophin Releasing Hormone Agonist (GnRH-A) is a hormone that is commonly used for the treatment of adenomyosis, it lowers estrogen levels to menopausal levels and increase adenomyotic apoptosis in the myometrium.
This chapter provides several systematic reviews and meta-analyses of HIFU combined with GnRH-A in adenomyosis and provides proof-based medical evidence for clinical applications.

Material and methods:
Vannuccini and Petraglia's study that is included in this meta-analysis met the following criteria. It compares HIFU combined with GnRH-a versus. HIFU solely in patients with adenomyosis. The HIFU group combined with GnRH-a is defined as the experimental group, the HIFU group itself is defined as the control group. Strubel et al. The objects of the study: (1) women aged 18–50 years; women with focal or diffuse adenomyosis diagnosed by ultrasound, MRI, or computed tomography (CT); patients who have not received any treatment for adenomyosis within 3 months prior to the study. Abbott Outcome indicators: The main outcome indicators are changes in uterine volume while adenomyotic lesions are defined as the main outcome. The secondary outcomes are the visual analog scale (VAS) score for dysmenorrhea, menstrual volume score, serum CA125 level, and recurrence rate. The exclusion criteria for the inclusion of studies in this report are the following: animal experiments, case reports, conference abstracts, conference proceedings, editorial letters, guidelines or comments; repeated study; studies in which the full text is not available; patients with uterine fibroids or other gynecological diseases, whose clinical symptoms are similar to adenomyosis and study less than 3 months HIFU after ablation.

Results:
Of the 390 articles, 9 studies were retained with data of 766 patients analyzed in this meta-analysis (11-19). Of the nine studies, one of them was using MRI for the imaging diagnosis of adenomyosis, six were using transvaginal ultrasound or MRI, and the other two did not report specific imaging diagnostic methods. Although these studies provide information about the diagnostic imaging methods used, they do not provide specific imaging criteria for the diagnosis of the adenomyosis.

Changes in the physiology of adenomyosis

1. Changes in uterine volume
Among the nine studies included, only three reported a method of generating random-location sequences, which was the random number table method. The analysis demonstrated the change of

Uterine Volume as the rate of uterine volume reduction after HIFU in 232 patients. The results of the meta-analysis showed that the rate of uterine volume reduction in the HIFU group with GnRH-a was higher than that in the HIFU only group at 12 months after the procedure 13,20).

2. Changes in volume of adenomyotic lesions
Three studies (239 cases) reported changes in lesion size before and after HIFU ablation which showed that the volume of the lesions in the experimental group was smaller than that in the control group in 3 and 6 months after the procedure. Although the results of the study showed no significant difference in both groups ($p > 0.05$) (11,12,17).

3. VAS Score for Dysmenorrhea
A total of five studies (367 cases) used VAS to assess patient with dysmenorrhea. The results of the meta-analysis showed that the VAS score for dysmenorrhea in the HIFU group with GnRH-a was lower than the HIFU group alone after the procedure (11,13,14,17,18).

4. Menstrual Volume Score
Three studies (243 cases) used the menstrual volume score to assess menstrual bleeding. The results of the meta-analysis showed that the menstrual volume score of the HIFU group with GnRH-a was lower than that of the HIFU group itself after the procedure (14,16,19).

5. Levels of Serum CA125
Three studies (252 cases) evaluated patients' levels of serum CA125. The results of the meta-analysis showed that serum CA125 levels in the HIFU group with GnRH-a were lower than the HIFU group alone after the procedure (11,17,18).

6. Recurrence Rate
Three studies (314 cases) compared the recurrence rates in the experimental and control groups. The results of the meta-analysis showed that the relapse rate in the HIFU group with GnRH-a was lower than that in the HIFU group itself (15,16,19).

7. Pregnancy Outcome
One study reported patient pregnancy outcomes at 6 months after treatment. There were five pregnancies reported after the HIFU intervention combined with GnRH-a ($n = 45$), three of which delivered naturally and two ended in abortion. In the HIFU only group ($n = 46$), there were four reported pregnancies following HIFU ablation, one resulting in natural delivery, one resulting in miscarriage and two ending in abortion.

Table 1 Characteristics of Studies

Researchers	Research Design	Data	Research Groups	Control Group	Numbers of Respondents	Age of Respondents	Follow up	Diagnostic Examination	Total Energy	Average of Power
Yang and Xie	Retrospective	Random	HIFU+ GnRH-A	HIFU	38	41,6±6,3	12	USG TV/ MRI	NA	NA
Guo et al	Prospective	NA	HIFU+ GnRH-A	HIFU	45	41,6±4,7	12	USG TV/ MRI	398,26±0,39	392,79 ± 63,3
Jiang et al	Prospective	NA	HIFU+ GnRH-A	HIFU	46	40,6±4,4	3	USG TV/ MRI	298,26±2,66	294,32 ± 7,3
Xu et al	Retrospective	Random	HIFU+ GnRH-A	HIFU	42	38,3±7,3	12	USG TV/ MRI	NA	50-400
Guo et al	Prospective	NA	HIFU+ GnRH-A	HIFU	55	41,0±4,7	6	MRI	298,26±2,66	350-400
Xio-Ying et al	Retrospective	Random	HIFU+ GnRH-A	HIFU	38	41,6±6,3	12	USG TV/ MRI	398,2 ± 0,3	392,7 ± 63
Yang et al	Retrospective	Random	HIFU+ GnRH-A	HIFU	40	40,6±5,3	12	NA	NA	NA

Discussion:

The results of the data of this meta-analysis from 766 patients showed that, HIFU combined with GnRH-a compared to the HIFU only group, for the treatment of adenomyosis had greater effectiveness in reducing uterine volume and adenomyotic lesions and alleviating symptoms.
Adenomyosis is a common and difficult gynecological disease that seriously affects women's health and quality of life. Effective symptom relief, relapse prevention, and increased pregnancy rates are problems that must be solved. Compared to currently available therapies, HIFU is a non-invasive and innovative technology for adenomyosis while still at risk of recurrence.

The working mechanism of HIFU resides in producing thermal and cavitation effects that are altered by the mechanical effects of ultrasound causing the target tissue temperature at of the focal point to rise above 60–100◦C, causing non-coagulation thermal necrosis lesions. At the same time, the surrounding structures are not damaged. Previous studies found that uterine smooth muscle tissue in adenomyotic lesions was sensitive to HIFU. HIFU treatment was an effective and ideal treatment for adenomyosis. A retrospective study by Lee et al. enrolled 889 patients with adenomyosis who underwent ultrasound-guided HIFU (USgHIFU). The results revealed that the uterine volume reduction rate was 60.1% at 3, 6, and 12 months after the procedure, respectively. This was consistent with the results of a recent systematic and meta-analysis showing a substantial effect in reducing uterine volume after HIFU treatment for adenomyosis in 12 months (20).

GnRH-a therapy can effectively relieve pain in adenomyosis patients by reducing regulation of GnRH receptors in the body, thereby reducing the level of gonadotropins secreted by the pituitary gland which results in decreased ovarian function.
HIFU combined with GnRH-a can help maintaining the effect of HIFU therapy and reduce relapse rates. Most of the studies involved, suggest that patients should be given GnRH-a three times after HIFU ablation. The first GnRH-a is given on the first to third day of the first menstruation after HIFU therapy. Then, the interval between the two GnRH-a injections is within 28 days.

The results of the existing study show that the symptoms of both groups are all improved after the procedure, but the VAS or dysmenorrhea scores and menstrual volume scores in the HIFU group combined with GnRH-a are lower than in the HIFU only group. The levels of serum CA125 are also decreased. Although the results of the VAS score for dysmenorrhea show that HIFU combined with GnRH-a can better alleviate dysmenorrhea in each patient, there wis still excessive heterogeneity.

The relationship between adenomyosis and infertility is not clear, but adenomyosis can affect a woman's fertility, this is mainly related to disruption and thickening of the myometrial junctional zone (JZ), and hypo-acceptability of the endometrium. In recent years, due to the continuous improvement of various ultrasound diagnostic methods and the increasing age of women seeking infertility treatment, the rate of women with a diagnosis of adenomyosis among infertile women has increased. Traditionally, infertile patients with adenomyosis are treated with GnRH-a or they may have adenomyosis (adenomyomectomy) removed surgically. Studies have shown that HIFU is a safe and effective procedure for infertile women and it does not increase obstetric risk (21).

Conclusion:

The results of this meta-analysis show that compared with HIFU only treatment the HIFU accompanied by GnRH-a therapy used on adenomyosis, obtained a greater level of effectiveness in reducing uterine volume and adenomyotic lesions and alleviating symptoms. However, because the number of studies included is too small, further research that has a long-term evaluation is needed.

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007-PSTR The value of Truscreen (an artificial intelligence cervical cancer screening system) in high-risk HPV positive patients.

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Objective:

To investigate the value of artificial intelligence cervical cancer screening system TruScreen (TS), an artificial intelligence cervical cancer screening system in high-risk human papillomavirus (HPV) positive patients in real clinical environment.

Methods:

318 patients with high-risk HPV positive in the gynecological clinic of our hospital from May 2020 to June 2021 were analysed retrospectively. Colposcopy was performed when there were colposcopy referral indications.

Results:
Among the 318 patients, 203 were TS negative and 115 were TS positive, of which 84 were referred to colposcopy and biopsy under the guidance of colposcopy. Among the 318 patents, 74.53% (237/318) were single type HPV infection, and 25.47% (81/318) were more than two types of HPV infection. In terms of HPV types, the top 5 types are 52, 58, 51, 56 and 16. Hpv52 accounted for 27.4% (87/318), followed by HPV58, accounting for 17.30% (55/318). A total of 84 patients underwent colposcopy. The negative predictive values of TS and TCT screening for cervical cancer and precancerous lesions were 33.33% and 16.90% respectively; The positive predictive values were 88.41% and 92.31% respectively; The sensitivity was 85.92% and 16.90% respectively; The specificity was 38.46% and 92.31%, respectively. Among 251 patients with TCT < ascus and non-16/ 18 high-risk HPV positive, 49 underwent colposcopy. The positive predictive value of TS for cervical cancer and precancerous lesions was 84.78% and the sensitivity was 92.86%.

Conclusion:
This study shows that in the real clinical environment, TS has better sensitivity than TCT in cervical cancer screening, but less specificity than TCT. In the population with TCT results < ascus and non 16/18 HPV positive, TS screening can be considered as one of the means of hierarchical management. However, the current research sample size is small, which needs to be further discussed by large sample clinical research.

008-PSTR Diagnostic hysteroscopy for infertility: An incidental finding or misdiagnosis? Synchronous endometrial and ovarian cancer (SEOC).

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Objective:

To highlight the perplexity in diagnosis of endometriosis in an infertile female

Method:

A 37 years old patient, P0010, presented with secondary infertility and dysmenorrhea (congestive and spasmodic) for last 2 years. She had no menstrual irregularities or coital difficulties and had adequate coital frequency. Spouse history was insignificant. There was a history of a spontaneous abortion at 1.5-month POG, 8 years ago. When she was conceived with Ovulation Induction. On examination the uterus was normal in size, anteverted, fixed with 6x6 cm cystic masses palpable in B/L adnexa with restricted mobility and tenderness. On further investigating, semen analysis was normal. HSG showed bilateral fill and spill. AMH was 0.47 ng/ml. CA 125 levels were 151 IU/L. USG pelvis revealed normal size uterus with ET-11 mm and Bilateral masses with typical picture of endometrioma with 6-7 cm in largest dimension. She was planned for diagnostic hysteroscopy and laparoscopy.

On hysteroscopy: the endocervical canal was normal. The uterine cavity volume was normal. Fluid filled vesicles like structures seen arising from all endometrial walls more on right side (fig. 1). B/L Ostia visualized, no current seen. Endometrial biopsy taken.

On diagnostic laparoscopy, bilateral ovarian masses suspicious of malignancy were seen. Decision for staging laparotomy was taken. Peritoneal fluid cytology sent. Bilateral multiloculated Ovarian masses seen (Fig. 2a). On the left side, 10x12cm bosselated a multiloculated solid cystic mass was

removed and sent for frozen section which was suggestive of Borderline tumour (Fig. 2b). Similar mass of size 6x5cm was present on right side. Patient's attendant was counselled about the prognosis. They opted for B/L Salpingo-oophorectomy. An infracolic omentectomy was performed and Multiple Peritoneal biopsies were taken.

Post-operative histopathology report disclosed: fluid cytology to be negative for malignant cytology, category II with Endometrioid borderline tumour. Endometrial biopsy showed Ca endometrium (endometrioid type)
IHC demonstrated Tumour cells to be positive for oestrogen and progesterone receptors. Negative for WT1 –peritoneal biopsy /omental free of tumour, P53-normal expression (wild type).

Result:

Ultrasound imaging may not be conclusive in large bilateral endometriomas.

Conclusion:

Synchronous endometrial and ovarian cancer of endometrioid type may be a rare presentation in females presenting with bilateral endometriomas.

Fig. 1- Diagnostic hysteroscopy revealed Fluid filled vesicles like structures arising endometrium globally. Final histopathology- endometrioid Ca endometrium.

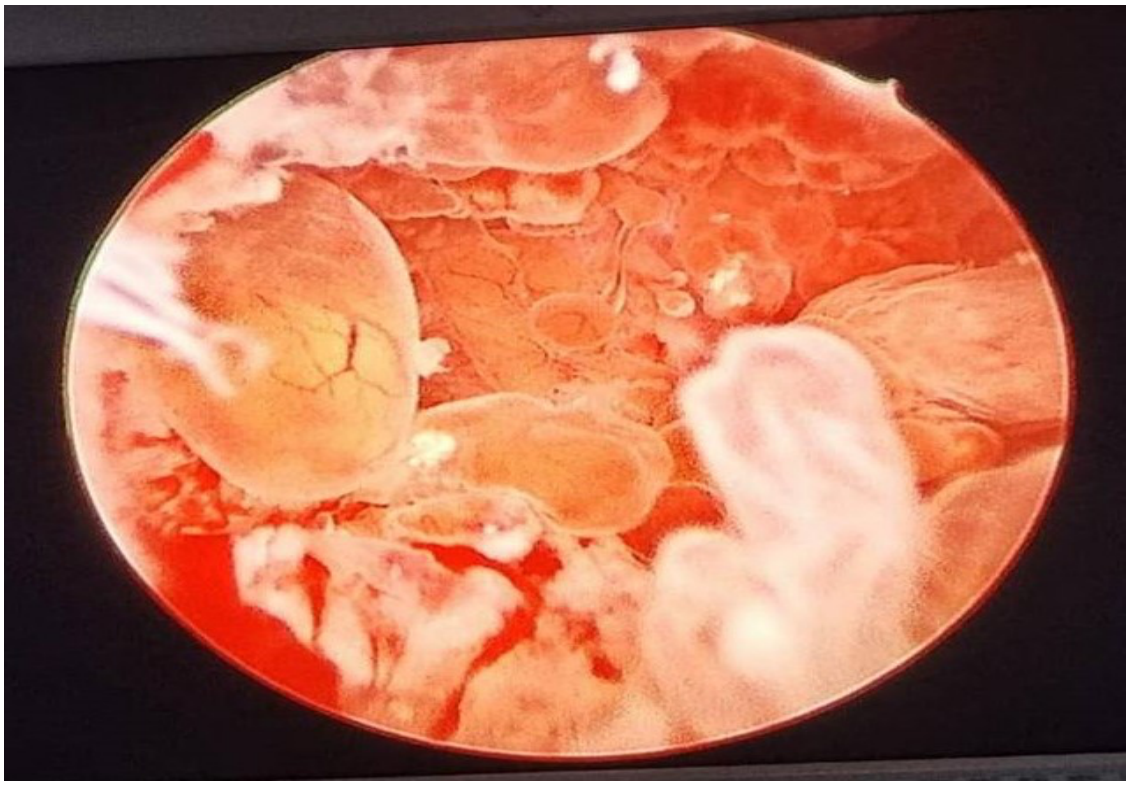


Fig. 2a- Bilateral suspicious looking masses on laparotomy.

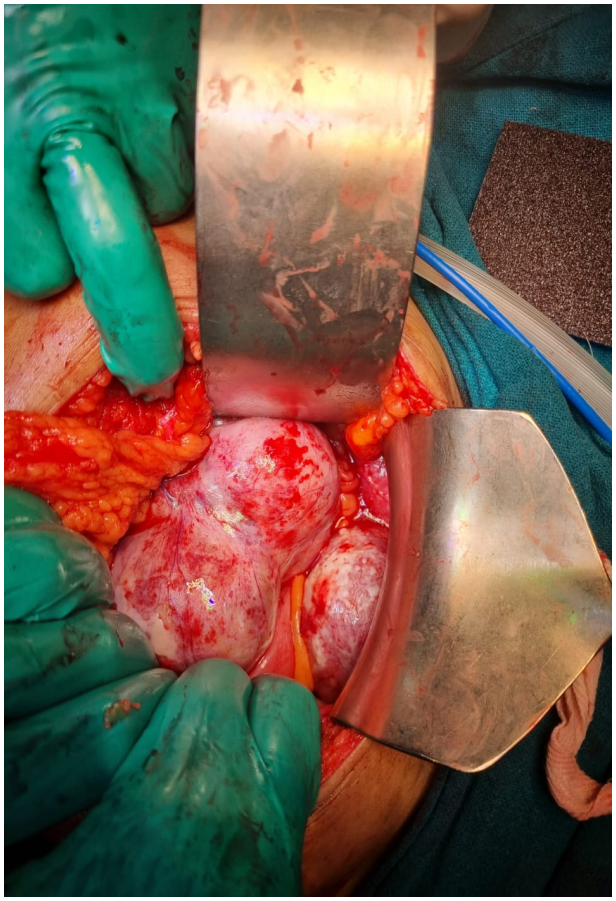


Fig. 2b- Left ovarian mass. 10*12 cm, bosselated, solid cystic mass.

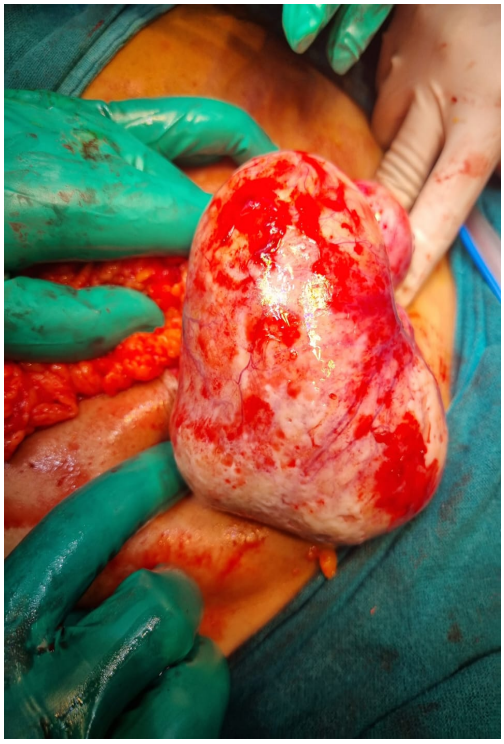
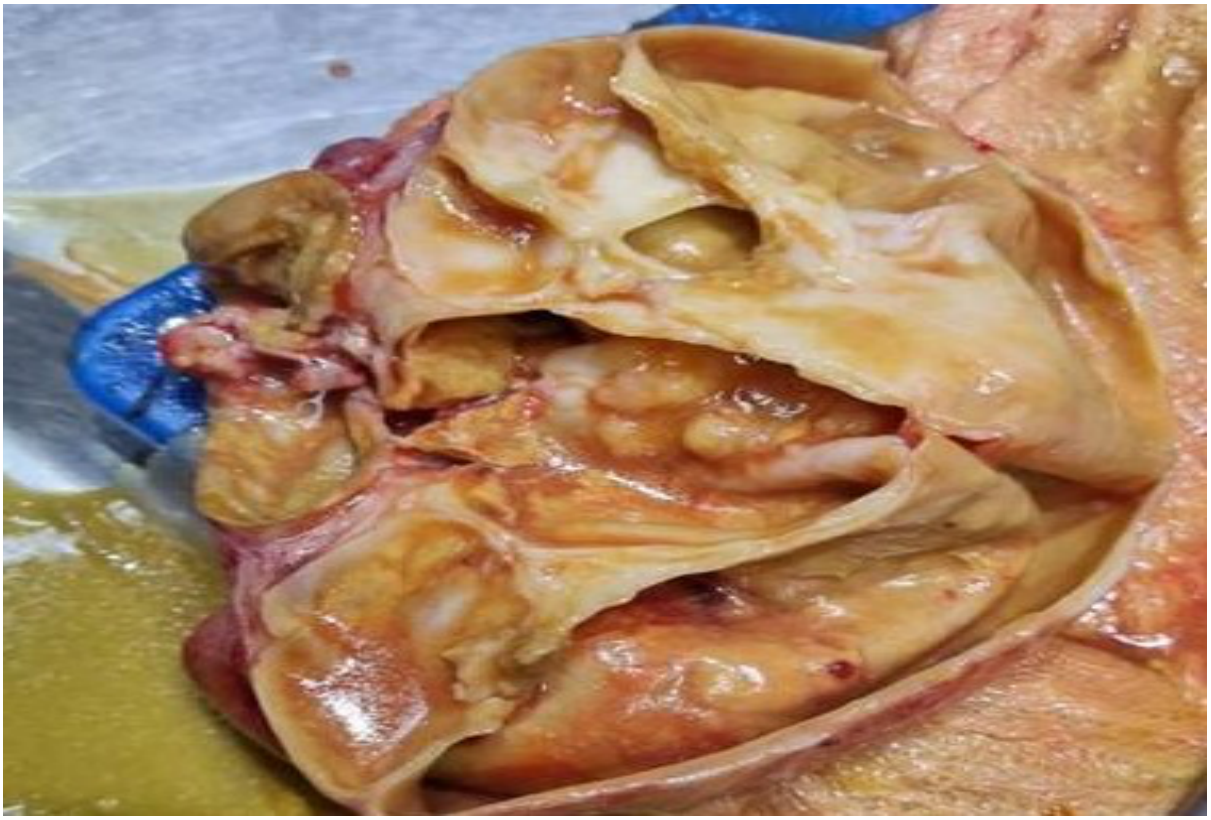


Fig. 3- Gross specimen prior to frozen section.



009-PSTR The Role of Hysteroscopy in Patients with Recurrent Implantation Failure Before Starting In-Vitro Fertilization: A Systematic Review and Meta-Analysis.

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Objective:

Recurrent implantation failure (RIF) remains the most challenging in-vitro fertilization (IVF) problem to treat. This is because the overall success rate is only approximately 30%. Hysteroscopy remains the gold standard for diagnosing and treating intra-uterine anomalies. This study aimed to evaluate the role of hysteroscopy (HC) in improving pregnancy outcomes in patients with RIF.

Methods:

A systematic search was performed in PubMed, ScienceDirect, and Cochrane using MeSH terms if applicable and in accordance with the PRISMA guidelines, to determine the role of hysteroscopy compared to patient who didn't undergo hysteroscopy. The Newcastle–Ottawa scale (NOS) was used to assess the risk of bias in this analysis and Review Manager 5.4 to calculate the result of 95% CI for the outcomes. The endpoints of interest were clinical pregnancy rate, live birth rate, implantation rate, and miscarriage.

Results:

A total of 3 randomized controlled trial (RCT) and 5 cohort studies with 4,679 patients were included. Pooled analysis showed patients who underwent HC was associated with higher clinical pregnancy (OR 1.56, 95%CI 1.36-1.80), live birth (OR 1.44, 95%CI 1.20-1.72), lesser miscarriage (OR 1.27, 95%CI 1.01-1.61), and implantation rate (OR 1.32, 95%CI 1.09-1.59). Further subgroup analysis suggest HC had significantly greater effect in clinical pregnancy rate for patients with abnormal HC finding (OR 1.20, 95%CI 1.01-1.42), but no significant difference in live birth and miscarriage.

Conclusion:

HC plays a significant role in improving clinical pregnancy rate, especially in patients with abnormal HC findings. HC also improves implantation rate, live birth, and lesser miscarriage in patients with RIF. Since the number of the study is still limited, further investigations are still needed to confirm the results.

010-PSTR Unruptured Ectopic Pregnancy with Risk Factor History of Miscarriage

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Objective:

Ectopic pregnancy is a known complication of pregnancy loss that can carry a high rate of morbidity and mortality when not recognized and treated promptly. It may present with pain, vaginal bleeding, or more vague complaints such as nausea and vomiting. Aim this study is to describe a case of unruptured ectopic pregnancy so we can prevent delayed diagnosis and serious complications.

Methods:

This study is case report about Mrs. N 32 years old female, who came consulting with a main complaint of abdominal pain and vaginal bleeding with positive serum hCG levels. This is patients second pregnancy with a previous history of miscarriage and contraceptives used. The Ultrasound result found an extrauterine gestational sac with no sign of free abdominal fluid. Patient then underwent diagnostic laparoscopy and a tubal pregnancy on left fallopian tube was found. A salpingectomy was then performed. A chromo perturbation was also performed resulting in a patent right fallopian tube

Result:

The diagnosis of ectopic pregnancy has important clinical implications, but is easily misdiagnosed. The history of miscarriage in this patient could become the risk factor for misdiagnosing the ectopic pregnancy. Abdominal pain and vaginal bleeding from this patient can be caused by damage to the fallopian tubes due to implantation following inflammation that leads to pain and bleeding. The diagnosis is confirmed with a positive serum hCG levels and the ultrasound result. Diagnostic laparoscopy was then chosen due these facts. Chromo pertubation was performed to demonstrate the patency of the remaining right fallopian tube

Conclusion:

Because the early diagnosis of ectopic pregnancy is essential, all sexually active women with a history of lower abdominal pain and vaginal bleeding should be referred to a hospital early for ultrasonography and measurement of serum concentrations of hCG to verify the diagnosis. Diagnostic laparoscopy is necessary if the clinical situation cannot be clarified or if the patient's condition deteriorates.

011-PSTR Laparoscopy vs Laparotomy in Ectopic Pregnancy: A Study from General Hospital Prof. Dr. R. D. Kandou Manado in 2021-2022

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Background:

This study aims to compare the operative findings, mean duration of surgery, mean hospital length of stay, and post operative complications of laparoscopy compared to conventional laparotomy in the management of patients with ectopic pregnancy.

Methods:

A retrospective cohort study was conducted at General Hospital Prof Dr. R. D. Kandou Manado from 2021 – 2022. A total of 142 patients surgically confirmed with ectopic pregnancy were included in the study. The main outcomes were operative findings (site of ectopic pregnancy), mean duration of surgery, mean hospital length of stay, and post operative complications (the number of patients experiencing both hypovolemic shock and anaemia). Hypothesis was formulated during data collection.

Results:

During the study period, 142 patients presented with an ectopic pregnancy. Patients were divided into 2 groups: Group I (N=8) had their EPs removed laparoscopically; Group II (N=134) had a laparotomy. On the Group I, most patients were 25–29 years old (4.22%), resided same between outside and inside the city (2.82%), housewives (3.52%), senior high school as last education (4.22%), most of them were multiparous 2-4 (4.93%), and never done antenatal care (4.22%). On the Group II, most patients were 30–34 years old (75.35%), resided inside the city (53.48%), housewives (66.19%), senior high school as last education (71.13%), most of them were multiparous 2-4 (75.35%), and never done antenatal care (91.54%). Fallopian tube (91.6%) was the most common site for ectopic pregnancy followed with fimbriae (5.6%) and cornual (2.8%). There was clinically significant shorter length of hospitalization on laparoscopy group compared to laparotomy group (3.38 vs 4.40 days, p=0.057). However, mean duration of surgery was not significantly different (95.94 vs 99.38 minutes, p=0.752). No significant difference or notable hypovolemic shock findings found within ectopic pregnancy sites. However, there was a significantly notable difference of anemia rate between fimbriae, cornual, and tubal (87.5% vs 50.0% vs 24.6%, p <0.001).

Conclusions:

Laparoscopic is a safe and effective surgical management option for patients with ectopic pregnancy without complications. We conclude that Laparoscopy should be the choice in un-complicated ectopic pregnancy. Laparoscopy provides benefits as it offers shorter duration of surgery and hospital stays with no life-threatening post-operative complication (hypovolemic shock and anemia) with cosmetically better scar compared to conventional laparotomy. However,

due to limited samples, study with better quality (i.e., RCT) bigger samples should be conducted to confirm laparoscopy superiority in better power and sample adequacy.

012-PSTR Intrauterine Device (IUD) Translocation in Young Women: A Case Report.

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Background:

Intrauterine device (IUD) translocation transposes the IUD from the initial intrauterine placement to another place within or outside the uterus. This might happen spontaneously or due to several factors, such as uterine contractions, pregnancy, or IUD insertion error. The prevalence of IUD translocation, in general, is very low, and the incidence rate is about 0.1 – 8% from the overall IUD acceptor, making this case very rare.

Methods:

To report a case of IUD translocation, located outside the uterine cavity.

Results:

A young P1A1 woman with an IUD translocated outside the uterine cavity with a history of Cesarean section in 2017, this woman decided to use an IUD for her contraception six months after the Cesarean. In 2019 the patient was diagnosed with a ruptured ectopic pregnancy and left salpingo oophorectomy was done. In 2021 the patient decided to remove the IUD but the attempt failed, translocation of the IUD was suspected, and pelvic Multi-slice Computerized Tomography (MSCT) was done, suggesting extrauterine IUD placement on the right adnexa up to the posterior part of the uterus. Laparoscopic extraction of the IUD was decided, during the operation the IUD was found to be covered by omentum and part of the intestine, adhesiolysis was done by a digestive surgeon. The IUD was then extracted on the right adnexa.

Conclusion:

IUD translocation is a rare complication. Several known mechanisms are: insertion complications, uterine contraction, and myometrial erosion. While ectopic pregnancy is one of the side effects of IUD usage. IUD translocation can be evaluated by pelvic X-Ray and abdominal/pelvic CT scan making sure the location of the IUD. The preferred extraction method is laparoscopy. Even though IUD is one of the most used contraception methods and insertion can be done in primary health care units by a trained health care provider, caution should always be in mind for every insertion. In this case the translocated IUD was found in according to the imaging studies.

013-PSTR Clinical characteristics of infertile patients undergoing laparoscopic adhesiolysis: a descriptive study in a single center.

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Objective:

Infertility has been attributed to some pelvic pathologies such as endometriosis, gynecologic tumours, pelvic inflammatory disease, etc. The advancement of laparoscopic techniques has enabled definitive diagnosis and treatment for these women. Despite this development, the decision to do surgery remains controversial, especially in patients with minimal clinical symptoms. In this study, we aim to present clinical characteristics of patients treated with laparoscopic surgery prior to infertility treatment.

Methods:

This study was conducted in Royal IVF Clinic, Bali Royal Hospital, Denpasar, Bali. We performed 318 laparoscopic gynecologic surgeries during the 2021-2022 period for various indications. We included 25 patients with a duration of infertility more than 2 years aged 20-35 years old, who underwent laparoscopic surgery due to suspicions of pelvic pathologies. Decision for laparoscopic surgery was based on ultrasound or hysterosalpingography findings suggesting non-patent fallopian tubes, hydro salpinges, or pelvic adhesion. Data were collected from hospital medical records.

Results:

Clinical symptoms and signs including transvaginal ultrasound examination were assessed. All patients included had tubal pathology in the form of grade 2-4 hydrosalpinx and pelvic adhesion during laparoscopic surgery. Most patients experienced chronic pelvic pain (60%; n=15) and retroflexed uterus with stiffness (60%, n=15). Less common findings were menstrual pain (24%, n=6) and slinger pain (8%, n=2). From ultrasound examination, we found sliding sign negative (20%, n=20), echogenic filament (76%, n=19), free fluid in the Douglas pouch (80%, n=20) and hypoechoic tubular structure in adnexa (96%, n=24).

Conclusion:

Laparoscopy is a minimally invasive surgery with extensive application in the field of infertility. This technique allows clear visualization of female organ, and treatment to many pelvic pathologies. Despite its benefits, it may not be suitable for some patients, considering its high-cost and limited availability. Thus, the decision to operate should also consider clinical aspects of the patients, to ensure patients' satisfaction and treatment efficiency.

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014-PSTR Challenges of morbidity management involving ruptured abdominal pregnancy in the third trimester: a case report.

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Background:

Abdominal pregnancy is a very rare form of ectopic pregnancy in which the products of conception can be found in the pouch of Douglas, on the omentum, on the pelvic sidewall, the liver, the diaphragm, and even the great abdominal pelvic vessels. The incidence of ectopic pregnancy is 1:10,000 to 1:30,000 pregnancies and abdominal pregnancy accounts for approximately 1% of the ectopic pregnancies. It is important make an early diagnosis of abdominal pregnancy to avoid morbidity and mortality. Delayed diagnoses are mainly the result of difficulties in clinical assessment caused by a variety in presentation. Early laparoscopic management can be done to prevent complication. In this case report, challenges of the management of the morbidity involving abdominal pregnancy in the third trimester will be discussed.

Objective:

To discuss the challenges of the management of morbidity involving ruptured abdominal pregnancy in the third trimester and the role laparoscopy to prevent complications.

Methods:

A Case Report

Results:

A female patient, 40 years of age, G2P1A0 with 25-26 weeks of gestation, was referred from a tertiary hospital with the suspicion of an abdominal pregnancy and anemia. This patient was previously

known to have had an ectopic pregnancy at 10 weeks' gestation and was advised to proceed to a hospital with laparoscopic facilities. The patient never checked on her pregnancy due to inadequate knowledge of the risks. An evaluation was performed later and an extrauterine pregnancy with a placenta that was attached to the posterior side of the uterus and to the pouch of Douglas, including severe oligohydramnios, and suspected congenital abnormalities was diagnosed. There appeared to be free fluid in the hepato-spleno-renal space with an image of hydronephrosis of the right kidney. Laparoscopy could not be performed due to unstable hemodynamics. Treatment was performed by stabilizing the general condition and transfusion of packed red blood cell (PRC) and emergency laparotomy. Due to massive bleeding, a total hysterectomy was performed. The placenta was partially removed and some of it was left in the pelvic cavity.

Conclusion:

Laparoscopic management can be very beneficial for in the early treatment of abdominal pregnancy. Many hospitals in Indonesia cannot perform laparoscopic operative procedures due to several factors such as inadequate hospital facilities, shortage of personnel trained in laparoscopic surgery, overall cost of the laparoscopic procedure and lack of insurance coverage. There is also a lack of knowledge by the patients concerning this procedure. In patients with these or similar symptoms, the delay in response causes the patient to experience high morbidity. The early treatment in cases of ectopic pregnancy, can prevent morbidity and mortality in patients, especially in abdominal pregnancies.

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