IGCS 2023 Annual Global Meeting SEOUL

IGCS 2023 Abstracts: On-Demand Surgical Film Cinema

Registered delegates will have access to the on-demand surgical films via the IGCS 360 Educational Portal and the Surgical Film Cinema in the Exhibition Area at the meeting venue.



SF001 / #576

Topic: AS03. Cervical Cancer

ROBOTIC ASSISTED RADICAL PARAMETRECTOMY WITH BILATERAL PELVIC LYMPH NODE DISSECTION IN CERVICAL CANCER

<u>G R Abhirami</u>¹, Shruthi Dhevi Rs¹, Shree Bharathi¹, Monica Saraswat², Rohit Ranade²

¹Narayana Health Mazumdar Shaw cancer centre, Gynecologic Oncology, Bangalore, India, ²Narayana Health Mazumdar Shaw cancer centre, Gynecologic Ongology, Bangalore, India

Introduction: The diagnosis of invasive cervical cancer after hysterectomy for non-malignant indications is very common. For patients presenting with incidental diagnosis of early stage invasive cervical cancer (FIGO stages 1A1-1B2), two possible strategies can be proposed: Adjuvant radiation therapy with no tumour target or Radical parametrectomy with upper vaginectomy and pelvic lymph node dissection. This video is to demonstrate Robotic assisted radical parametrectomy with bilateral pelvic lymph node in a case of 46 years, multiparous lady with cervical cancer – post hysterectomy for abnormal uterine bleeding.

Description: Surgery was initiated by port placement. Intra-operatively adhesions were noted between vault, left lateral pelvis wall and sigmoid colon. Adhesions were released carefully. In this procedure, the crucial step is to create the avascular pelvic spaces and ureteric dissection. Bilateral retroperitoneal space was created. Iliac vessels and ureters were identified. Paravesical and pararectal space were created on both sides. Pre-rectal was created isolating the uterosacral ligaments. Bladder was dissected inferiorly upto middle third of vagina. Ureteric dissection is carried out upto its entry into bladder. Radical parametrectomy with upper vaginectomy was done. Bilateral pelvic node dissection was done. Post-operative period was uneventful. Histopathology examination was reported as no residual disease with negative lymph. Hence she is on regular follow-up.

Conclusion/Implications: Radical parametrectomy presents with lower complications, making it the preferred approach to treat younger patients, when compared to radiation therapy. Minimally invasive procedure like robotic assisted surgery is feasible and effective than the traditional laparotomy for performing radical parametrectomy.



SF002 / #221

Topic: AS03. Cervical Cancer

RADICAL HYSTERECTOMY AND UTEROSACRAL LIGAMENT SUSPENSION BASED ON MEMBRANCE ANATOMY

Jian Cao1, Dake Li2

¹Nanjing Maternity and Child Health Care Hospital, Women's Hospital of Nanjing Medical University, Department Of Gynecology, NanJing, China, ²Nanjing Maternity and Child Health Care Hospital, Women's Hospital of Nanjing Medical University, Department Of Gynecology, Nanjing, China

Introduction: The complexity of pelvic anatomy renders abdominal radical hysterectomy susceptible to bleeding. This study examines the potential clinical application of the membrane anatomy concept in radical abdominal hysterectomy. Furthermore, pelvic floor dysfunction frequently occurs following radical hysterectomy, with uterosacral ligament suspension offering symptomatic relief.

Description: The membrane anatomy concept for radical hysterectomy entails the comprehensive removal of tissues and organs within the embryonic unit of the paramesonephric ducts. This includes a portion of the pelvic autonomic nerves in the fascial fusion space of the embryonic unit, as well as the primary trunk and branches of the uterine arteries and veins. Laparoscopic monitoring enables clear visualization during abdominal surgery. Concurrently, uterosacral ligament suspension can be easily performed.

Conclusion/Implications: Employing the membrane anatomy concept in radical hysterectomy results in minimal intraoperative bleeding, which proves advantageous in maintaining a clear surgical field anatomy, adhering to the "tumor-free principle" of surgery, and reducing the incidence of surgical complications and patient hospitalization time. This approach renders the surgery safe and feasible. Additionally, incorporating uterosacral ligament suspension during the procedure exhibits satisfactory short-term outcomes, alleviating the principal symptoms of pelvic floor dysfunction after radical hysterectomy.



SF003 / #612

Topic: AS03. Cervical Cancer

TYPE D1 RADICAL HYSTERECTOMY AND PARTIAL CYSTECTOMY IN LOCALLY RECURRENT CERVICAL CANCER WITH BLADDER INVOLVEMENT AFTER PEMBROLIZUMAB-BASED THERAPY

Renny Julianti¹, Hee Seung Kim², Soo Jin Park²

¹Faculty of Medicine Universitas Indonesia, Dr. Cipto Mangunkusumo Hospital, Department Of Obstetrics And Gynecology, Jakarta, Indonesia, ²Seoul National University Hospital, Obstetrics And Gynecology, Seoul, Korea, Republic of

Introduction: The combination of immune checkpoint inhibitors and chemotherapy, with or without bevacizumab, has demonstrated promising results in improving overall survival and is now part of the standard treatment after Keynote-826. Locally recurrent cervical cancer poses a challenge for treatment, particularly when the patient cannot receive radiotherapy due to fistula development. This video describes the use of pembrolizumab/bevacizumab with platinum-based chemotherapy (PBC) followed by organ-preserving surgery.

Description: A 31-year-old patient visited with locally recurrent cervical cancer after four years after undergoing radical trachelectomy for FIGO stage IB1 disease. The 4 cm tumor at the cervix showed invasion into the posterior bladder wall with multiple lymph node enlargements. The patient was not eligible for radiotherapy due to fistula development and was treated with a combination of PBC for six cycles followed by surgery. After systemic treatment, the tumor reduced to 1.5 cm, and lymph nodes decreased in size. During laparotomy, tumor invasion was found in the right pelvic sidewall and bladder. Type D1 radical hysterectomy was performed on the right side, and type B1 radical parametrectomy was performed on the left side. A 1 cm vesicovaginal fistula was found at the left ureter entrance, and partial cystectomy with bladder repair and right ureteroneocystostomy, along with systematic pelvic and paraaortic lymphadenectomy, was performed to achieve R0.

Conclusion/Implications: PBC can be used to treat locally recurrent cervical cancer. This therapy followed by surgery allows for the preservation of pelvic organs with R0 resection, and the patient can continue with pembrolizumab maintenance.



SF004 / #770

Topic: AS03. Cervical Cancer

COMPARISON OF SURGICAL AND CLINICAL OUTCOMES BETWEEN TOTAL MESOMETRIAL RESECTION METHOD AND CONVENTIONAL ROBOTIC RADICAL HYSTERECTOMY FOR CERVICAL CANCER; A PROPENSITY SCORE MATCHING ANALYSIS

Yoon Lee

Changwoon Hanmaeum Hospital, Obgy, changwon city, Korea, Republic of

Introduction: This study was aimed to compare the surgical and clinical outcomes between conventional robot nerve sparing radical hysterectomy (C-RRH) and total mesometrial resection method of robot radical hysterectomy (TMMR-RRH)

Description: TMMR can be standardized for all patients with locally defined tumors and appears to reduce morbidity, improve outcome and can potentially eliminate the need for adjuvant chemotherapy. It removes the complete Müllerian compartment except its distal part to preserve a functional vaginal vault. The identification of developmentally deduced pelvic visceroparietal compartments serves as a template for the lymph node basins to be cleared¹.

Conclusion/Implications: The propensity score matched cohot of 66 patients in each group showed the overall survival rate was 89% in the C-RRH and 95% in the TMMR- RRH group (p=0.728) (HR 0.77; 95% CI 0.18-3.27) and disease free survival rate was 83% in the C-RRH and 83% in the TMMR-RRH group (p=0.949). (HR 1.03; 95% CI 0.45-3.27) (106 vs 39 months median follow up). The recurrence pattern was significantly different in both group(p=0.034) and was not significantly median time to recurrence (11 vs 18months, p=0.271). In univariable and multivariable analysis with OS, involvement of resection margin(p=0.000) were found as independent significant risk factors and in regard to DFS involvement of resection margin(p=0.000) and deep stromal invasion(HR 3.84: 95% CI, 1.20-12.26, p=0.023) was found as independent significant risk factors. The present study found that TMMR-RRH provides the benefits of higher number of retrieved LNs, shorter operation times, however more blood loss and no disease free and overall survival benefit.



SF005 / #545

Topic: AS03. Cervical Cancer

THERAPEUTIC EFFECT OF EXTENDED PELVIC LYMPHADENECTOMY IN CERVICAL CANCER: A PROPENSITY-SCORE MATCHED COHORT STUDY

Yoon Lee

Changwoon Hanmaeum Hospital, Obgy, changwon city, Korea, Republic of

Introduction: To compare the survival outcomes of radical hysterectomy (RH) with extended pelvic lymphadenectomy (EL) versus conventional pelvic lymphadenectomy (CL) in cervical cancer patients with stage IB to IIA. To compare the survival outcomes of radical hysterectomy (RH) with extended pelvic lymphadenectomy (EL) versus conventional pelvic lymphadenectomy (CL) in cervical cancer patients with stage IB to IIA.

Description: We retrospectively evaluated 405 patients who underwent laparoscopic or robot RH with CL or EL for cervical cancer (stage IB-IIA) between 1995 and April 2019. We performed propensity score matching analysis to control for selection bias. We matched 111 patients for each group and compared their long-term clinical and survival outcomes using Cox regression analysis. The median follow-up period was 59 months. The EL group had better survival outcomes than the CL group, with higher rates of OS (95.5% vs. 87.4%, p = 0.013) and DFS (82.9% vs. 75.7%, p = 0.030). The EL group also had lower risks of death (HR = 0.305, 95% CI: 0.112-0.827, p = 0.028) and recurrence (HR = 0.495, 95% CI: 0.259-0.094, p = 0.034).

Conclusion/Implications: The study is a retrospective analysis of a large sample size (405 patients), which increases the statistical power of the results. RH with EL improved the survival outcomes of cervical cancer patients with stage IB to IIA compared to RH with CL. RH with EL improved the survival outcomes of cervical cancer patients with stage IB to IIA compared to RH with CL



SF006 / #457

Topic: AS03. Cervical Cancer

LAPAROSCOPIC SINGLE PORT RADICAL HYSTERECTOMY WITH TOTAL MESOMETRIAL RESECTION AS PART OF SURGICAL PROCEDURES IN CASES OF CERVICAL CANCER.

Yoon Lee

Changwoon Hanmaeum Hospital, Obgy, changwon city, Korea, Republic of

Introduction: The video is about **single port radical hysterectomy with total mesometrial resection** as part of surgical procedures in cases of cervical cancer. A 48-year-old patient with FIGO stage ib1 squamous cell cancer is shown

Description: In single port surgery, the operator provides traction or countertraction, and a hanging over or attraction suture through the abdomen is needed. The most important anatomic landmark for total mesometrial resection is superior hypogastric nerve and both hypogastric nerves and inferior hypogastric plexus. To identify these nerves following procedures are necessary. After extended lymphadenectomy, the pelvic anatomy could be examined more clearly including the superior hypogastric nerve promontory lower part of the aorta common iliac hypogastric vessels hypogastric nerve communicating with parasympathetic nerves and vesicle branches of the inferior hypogastric plexus. Cardinal ligament dissection is as follows. Opening of para vesicle and par rectal spaces vessels in the cardinal ligament were selectively separated. Only superficial and deep uterine vein were coagulated with bipolar forceps or ligature and cut but the neutral part was preserved, located at dorsal medial part of cardinal ligament.

Conclusion/Implications: Even though laparoscopic single port radical hysterectomy is difficult, but total mesometrial resection techniques is more difficult. It took a long time 203 minutes and blood loss was 100 ml. 7 days later she can do self-voiding without catheterization. choice between these techniques should be based on surgeon preference and experience, patient anatomy, and other clinical factors. The identification of independent risk factors for survival outcomes may help guide clinical decision-making and improve patient outcomes.



SF007 / #740

Topic: AS03. Cervical Cancer

FLUORESCENT-IMAGE-GUIDED PELVIC LYMPH NODE DISSECTION WITH RADICAL HYSTERECTOMY IN SINGLE-PORT LAPAROSCOPY

Young Joo Lee, Sang Wun Kim

Institute of Women's Life Medical Science, Yonsei University College of Medicine, Obstetrics And Gynecology, Seoul, Korea, Republic of

Introduction: The aim of this article is to demonstrate the feasibility and efficacy of florescent-imageguided pelvic lymph node dissection with radical hysterectomy in cervical cancer patients.

Description: A 43-year-old woman was diagnosed with cervix cancer by punch biopsy. Pelvic MRI showed a 2.0x1.5cm sized cervical mass and enlarged external iliac lymph node, and lymphovascular invasion with invasive squamous cell carcinoma was pathologically confirmed. The tentative FIGO stage was Cervix cancer IB. At the beginning of the operation, indocyanine green (ICG) 2cc was injected into the 3 O'clock and 9 O'clock of the cervix. After ICG injection, a single umbilicus incision was made, and pelvic lymph node dissection was performed guided by a florescent image colored by ICG. Contrary to sentinel lymph node biopsy, we selectively removed all the ICG-stained lymph nodes and lymphatic channels around the parametrium. After complete removal of lymph nodes and lymphatic channels, type C1 radical hysterectomy, paraaortic LN dissection, and left ovarian transposition were conducted. The greatest dimension of the residual tumor was 21mm, involving a deep one-third of the stroma invasion. There was no parametrial invasion or node metastasis except diffuse lymphovascular invasion. The patient was discharged on the 6th postoperative day without any surgical complications, including lymphocele or lymphedema. Currently, there is no recurrence; progression-free interval is 76 months.

Conclusion/Implications: Florescent-image-guided pelvic lymph node dissection with radical hysterectomy is the best method for pelvic lymph node dissection in terms of making it easy to operate, reducing complications associated with lymph node dissection, and reducing locoregional metastasis.



SF008 / #125

Topic: AS03. Cervical Cancer

WHOLE COURSE TUMOR FREE LAPAROSCOPIC RADICAL HYSTERECTOMY ON CERVICAL CANCER

Fujie Zhao

Sheng Jing Hospital of China Medical University, Gynecology Department, Shen Yang City, Liao Ning Province, China

Introduction: Because of the concern of the tumor exposure during the classical LRH procedure for cervical cancer,we designed and implemented a surgical approach that ensure no tumor exposure throughout the procedure.

Description: 1. The first step of the surgery is determing the lower border of the anterior and posterior vaginal walls which are intended to be excised. Then suture them together to seal the cervical cancer, so as to ensure no tumor exposure throughout LRH surgery. 2. 40 ml saline is injected into the vesicovaginal and rectovaginal spaces respectively to facilitate separation of the anterior and posterior spaces. 3. The anterior and posterior vaginal walls are cut to expose vesicovaginal space and rectovaginal space by monopolar electrocautery. Fingers are used to further separate the anterior and posterior spaces to reach the anterior and posterior reflection peritoneum. 4. A gauze is plugged into the two spaces respectively for support and as a marker. 5. after completing the pelvic lymphadenectomy, the operator cut the uterorectal and uterovesical reflection peritoneum to expose the gauze in above two spaces that have already been separated transvaginally . 6. After above procedures, the dissection of ureteral tunnel, and the cut of cardinal ligament, sacral ligament, and paravaginal tissues become simple. Finally, the LRH surgery is completed easily and safely, and no tumor exposure throughout the surgery.

Conclusion/Implications: This surgical method can not only ensure no tumor exposure in the whole course of LRH surgery on cervical cancer, but also make the LRH surgery simple and safe.



SF009 / #744

Topic: AS04. Endometrial/Uterine Corpus Cancers

SINGLE PORT ASSISTED LAPAROSCOPIC DEBULKING SURGERY FOR ENDOMETRIAL CANCER WITH BULKY LYMPH NODE LESION

Young Joo Lee, Sang Wun Kim

Institute of Women's Life Medical Science, Yonsei University College of Medicine, Obstetrics And Gynecology, Seoul, Korea, Republic of

Introduction: The purpose of this article is to demonstrate the possibility of single port assisted laparoscopic debulking surgery for endometrial cancer patients with bulky lymph node metastasis.

Description: A 36-year-old married woman with abnormal vaginal bleeding was diagnosed with grade 3 endometrioid endometrial cancer. Pelvic and abdominal MRI revealed endometrial lesions invading more than half of the myometrium. In addition, multiple enlarged lymph nodes suggestive of metastasis were shown in both iliac chains, paraaortic, and retroperitoneal area. The largest paraaortic lymph node is about 4cm in size. The patient underwent a single-port approach laparoscopic debulking. After indocyanine green injection into the cervix, we performed pelvic and paraaortic lymph node dissection. The largest lymph node, about 40mm, is noted on the L3L, severely adhered to vessels and soft tissues. Single-port approach laparoscopic debulking including hysterectomy with bilateral salpingo-oophorectomy, bilateral pelvic and paraaortic lymph node dissection and pelvic peritonectomy was done. We achieved complete resection without complications. The total operating time was 7 hours. According to the final pathological reports, the patient was diagnosed with endometrial cancer stage IVB. 12 of 29 lymph nodes were contained with metastasis, and extrapelvic peritoneal metastasis was noted. The patient was discharged on the 3rd postoperative day without any surgical complications such as lymphocele and treated with systemic chemotherapy after the operation. There was no recurrence or complications. The progression-free interval was 14 months.

Conclusion/Implications: Single port assisted laparoscopic debulking operation is feasible for endometrial cancer with bulky lymph node lesions.



SF011 / #797

Topic: AS11. Ovarian Cancer

SECONDARY LAPAROSCOPIC CYTOREDUCTION FOR RECURRENT OVARIAN CANCER FOLLOWING LAPAROSCOPIC PRIMARY DEBULKING SURGERY

Bo Seul Jegal¹, Joong Sub Choi², Jeong Min Eom²

¹HANYANG UNIVERSITY MEDICAL CENTER, Obstetrics And Gynecology, Seongdong-gu, Korea, Republic of, ²HANYANG COLLEGE OF MEDICINE, Obstetrics And Gynecology, Seongdong-gu, Korea, Republic of

Introduction: Background and Aims: To investigate the feasibility of laparoscopic secondary cytoreduction in patients with recurrent ovarian cancer with previous laparoscopic primary debulking surgery.

Description: Methods: Design: Case study. Patients: A 52-year-old Korean woman underwent laparoscopic secondary cytoreduction for recurrent ovarian cancer and previous laparoscopic primary debulking surgery. Interventions: Laparoscopy Results: A 52-year-old Korean woman had a laparoscopic primary optimal debulking surgery on September 22, 2015. The FIGO stage IIIC was confirmed and she received 12 cycles of paclitaxel/carboplatin chemotherapy. Since then, it had been checked as NED state for 6 months. During follow up, lab results showed elevation of CA125, and recurrence was confirmed by PET-CT imaging. We performed LAVH with BSO, CDS mass excision, pelvic and paralymphadenectomy during primary debulking surgery. In addition, diaphragm and omentectomy were performed. She received adjuvant chemotherapy with paclitaxel/carboplatin for 12 cycles. We performed the laparoscopic secondary cytoreductive surgery. Peritoneal cavity and diaphragm were clear and showed no metastatic nodule. Metastatic lymph nodes were confirmed along the left iliac vessels like seen in the previous PET-CT imaging and we resected them. What was seen as recurrence around right para-colic gutter area were metastatic nodule on the cecum surface. We removed the nodules and repaired the bowel serosa. She is receiving chemotherapy with stable disease at this time.

Conclusion/Implications: Conclusions: Our experience indicate that laparoscopy is a feasible and safe approach to optimal cytoreduction for patients with recurrent ovarian cancer in case of laparoscopic primary debulking surgery.



SF012 / #265

Topic: AS11. Ovarian Cancer

NON-ANATOMICAL LIVER RESECTION IN A CASE OF SOLITARY LIVER METASTASIS

<u>Shalini Rajaram</u>¹, Ayush Heda¹, Nirjhar Raj², Neeraj Yadav², Lakhwinder Singh¹, Nilotpal Chowdhury³, Dipendra Sharma⁴, Samikshya Thapa³

¹All India Institute of Medical Sciences, Rishikesh, Gynecologic Oncology (obstetrics & Gynecology), Rishikesh, India, ²All India Institute of Medical Sciences, Rishikesh, Surgical Gastroenterology, Rishikesh, India, ³AllMS Rishikesh, Pathology, Rishikesh, India, ⁴All India Institute of Medical Sciences, Rishikesh, Dept Of Obstetrics & Gynecology), Rishikesh, India

Introduction: Ovarian cancer is diagnosed at an advanced stage (FIGO stage IIIC-IV) in approximately 60–80% of cases and aggressive, complex surgical procedures are often needed to achieve an optimal cytoreduction. Liver metastasis is one of the most common organs for metastasis portending a poor prognosis. We present a surgical video of non-anatomical liver resection (wedge resection) for oligometastatic disease in a case of high-grade serous carcinoma ovary during interval cytoreductive surgery.

Description: 34-year P2L2A2 with high-grade serous carcinoma right ovary post right salpingo-ophorectomy with persistent solitary liver metastasis after 4 cycles of neoadjuvant chemotherapy for liver resection is presented. Intra-operatively, peritoneal washings, total abdominal hysterectomy, left salpingo-ophorectomy, retroperitoneal lymph node sampling, supracolic omentectomy and excision of 2x2cm peritoneal deposit adjacent to segment VI of liver was done. Intra-operative USG was used to localize the intraparenchymal lesion in segment IV/V of liver which measured 2.5x2cm. Non-anatomical liver resection was done with adequate resection margins after ligation of distal middle hepatic vein. Post-operative course was uneventful and final histopathology reported the lesion and peritoneal deposit to be positive for metastatic carcinoma.

Conclusion/Implications: Non-anatomical liver resection should become part of cytoreductive surgery, especially in surgically approachable oligometastatic disease. Feasibility of liver resection has recently been reported in a systematic review. However further studies are needed to address the prognostic impact of liver resections.



SF014 / #578

Topic: AS11. Ovarian Cancer

EXTENSIVE PERITONECTOMY OF OVARIAN CANCER BY REGION PARTITIONING ALGORITHM UNDER THE GUIDANCE OF MEMBRANE ANATOMY

Zhengmao Zhang, Hongxia Wang Fourth Hospital of Hebei Medical University, Gyn, Shijiazhuang, China

Introduction: To show extensive peritonectomy of ovarian cancer by region partitioning algorithm under the guidance of membrane anatomy.

Description: The theory of membrane anatomy is based on the premise that cell lineages of different organs do not mix at the boundary during embryonic development, the surface of each organ is covered by an envelope like structure. The key to success is to correctly identify the envelope of organs, find the white filaments (also called angel hair) in the membrane space and enter the right anatomical interface between organs. The scope of extensive peritonectomy includes the resection of all parietal peritoneum, part of visceral peritoneum, some mesentery and ligaments. The region partitioning algorithm was used to divide the whole abdominopelvic cavity into three parts by taking two lines, one was the upper edge of true pelvis, the other was the lowest margin of costal arch on both sides. Peeling the peritoneum by antagonistic drawing from the median abdominal incision to both sides of the lateral peritoneum by the way of envelopment from the periphery to the center.

Conclusion/Implications: The implementation of extensive peritonectomy by region partitioning algorithm under the guidance of membrane anatomy marked R0 cytoreductive surgery for ovarian cancer changed from the removal of scattered lesions or organs to a set of orderly and complete narrative surgical march, which can not only improved the thoroughness and safety of the operation, but also avoided omitting the invisible peritoneal metastasis to the naked eye, helped surgeons to clarify technique routes, and reached the realm of nature.



SF015 / #414

Topic: AS15. Rare Tumors

METASTATIC MESONEPHRIC-LIKE UTERINE CARCINOMA: ROBOTIC ASSISTED TUMOR DEBULKING

Hadi Erfani¹, Shadi Seraji², Farr Nezhat³

¹Baylor College of Medicine, Obstetrics And Gynecology, Houston, United States of America, ²NYU Langone-Long Island School of Medicine, Obstetrics And Gynecology, Mineola, United States of America, ³Nezhat Surgery for Gynecology/Oncology, Gynecologic Oncology, New York, United States of America

Introduction: Mesonephric-like adenocarcinoma (MLA) of the uterine corpus is a rare and distinct gynecological malignancy. MLA has a similar appearance to mesonephric adenocarcinoma of the uterine cervix or vagina, which originates from mesonephric remnants. Despite presenting with symptoms and signs similar to more common types of endometrial carcinoma, MLA tends to behave more aggressively, with advanced-stage disease at diagnosis, rapid progression, frequent recurrence, distant metastases, and poor prognosis.

Description: This video showcases a case of robotic-assisted tumor debulking in a 60-year-old patient with metastatic mesonephric-like uterine carcinoma. The patient had a past medical history of fibroid uterus and endometriosis and presented with pelvic pain and postmenopausal bleeding. Imaging showed a dominant intramural uterine fibroid that had significantly increased in size, right pelvic sidewall and external iliac lymphadenopathy, and associated peritoneal thickening. CT imaging showed intense hypermetabolic activity in the uterus consistent with malignancy and hypermetabolic pelvic lymph nodes. At the time of the procedure, the patient was found to have extensive peritoneal carcinomatosis, bulky lymph nodes, and a tumor on the ureter, with distorted anatomy due to a large multi-fibroid uterus and dense adhesive disease on the vesico-uterine space. This video aims to review the surgical techniques used in complex minimally invasive debulking procedures. By the end of the procedure, all visible cancer was removed. The procedure was uncomplicated, and the patient was discharged on postoperative day of

Conclusion/Implications: Our video provides valuable insights into the surgical techniques used to achieve complete tumor resection in complex cases with aggressive uterine tumors.



SF017 / #575

Topic: AS18. Surgical Techniques and Perioperative Management

SURGICAL PROCEDURES OF SINGLE PORT ROBOTIC PARAAORTIC LYMPHADENECTOMY

Sejin Kim, Keun Ho Lee

Seoul St. Mary's Hospital, Obstetrics And Gynecology, Seoul, Korea, Republic of

Introduction: Single port robotic paraaortic lymphadenectomy is challenging surgical procedures. We are to demonstrate the surgical procedures of transperitoneal paraaortic lymphadenectomy.

Description: Using bipolar and monopolar instrument of DaVinci SP robotic system, lymph nodes can be removed. With strength of articulating third arm, counter-traction of peritoneum made a clear view of retroperitoneal anatomy. In this video, DaVinci SP robotic paraaortic lymphadenectomy took 48 minutes and removed 15 paraaortic nodes. She discharged home on the next day of surgery without any events.

Conclusion/Implications: Left and right infra-mesenteric or infra-renal paraaortic lymphadenectomy can be safely done by SP robotic system In endometrioid endometrial cancer patients.



SF018 / #987

Topic: AS18. Surgical Techniques and Perioperative Management

GASTRIC RESECTIONS DURING UPPER ABDOMINAL CYTOREDUCTIVE SURGERY IN OVARIAN CANCER

<u>Claudio Lucena</u>¹, Jose Linhares¹, Reitan Ribeiro¹, Audrey Tsunoda²

¹Hospital Erasto Gaertner, Oncology Surgery, CURITIBA, Brazil, ²Hospital Erasto Gaertner/HCor/PPGTS

Pontificia Universidade Catolica do Paraná, Surgical Oncology, curitiba, Brazil

Introduction: Ovarian cancer is one of the most common gynecologic cancers and ranks eighth in mortality among women. More than 60% are detected in FIGO2018 stages III and IV. A complete cytoreduction is a significant prognostic factor. Eventual resection of gastric implants becomes an essential knowledge for the surgical treatment of ovarian cancer.

Description: This video demonstrates surgical techniques using current surgical equipment for the correct resection of stomach lesions in ovarian debulking. It's advise the introduction of a nasogastric tube to help mobilize the stomach. Initially demonstrated the resection of a lesion in the lesser omentum, which can be challenging due to rich vascularization and difficult access. The lesion is demarcated for its resection, and its dissection is started, paying attention to the preservation of the vascularization of the lesser curvature. Afterwards, we demonstrate a large lesion located on the posterior wall of the stomach. Starts performing the release of the transverse mesocolon of the lesion, taking care not to damage the vascularization of the colon. After shaving the stomach, hemostasis is performed with bipolar forceps and hemostatic suture. At the end, resection of the lesion in the gastric anterior wall was demonstrated. After its correct resection, a suture was performed to approximate the gastric serosa.

Conclusion/Implications: This video demonstrates reproducible standardized surgical techniques with simple materials for gastric ressections during ovarian cancer upper abdominal cytoreduction.



SF019 / #36

Topic: AS18. Surgical Techniques and Perioperative Management

VAGINAL NOTES APPROACH FOR SURGICAL OVARIAN SUPPRESSION IN AN ADVANCED STAGE BREAST CANCER PATIENT

<u>Pinyada Panayavaranant</u>, Tarinee Manchana Faculty of Medicine, Chulalongkorn University., Obstetrics And Gynecology, Bangkok, Thailand

Introduction: Breast cancer is a common malignancy in women and hormone receptor-positive tumors comprise approximately 70% of these cases. In premenopausal women with high-risk characteristics, ovarian suppression is a useful addition to endocrine therapy. Laparoscopic bilateral salpingo-oophorectomy is the preferred surgical option for hormonal ablation. However, it may result in wound complications and prolonged postoperative pain. Natural Orifice Transluminal Endoscopic Surgery (NOTES) is a novel technique that uses natural orifices without abdominal incisions to reduce surgical injuries and improve operative outcomes. This video showcases the use of the vaginal NOTES approach for bilateral salpingo-oophorectomy in an advanced stage breast cancer patient.

Description: This video demonstrates the detailed surgical procedure for vNOTES bilateral salpingo-ophorectomy in an advanced stage breast cancer patient. The video starts with patient positioning, followed by the insertion of the laparoscope through the vaginal canal. The fallopian tubes and ovaries are identified and dissected using specialized instruments, and the procedure is completed with removal of the specimens. The video emphasizes the technical aspects of the surgery and provides helpful tips for successful completion of the procedure.

Conclusion/Implications: Conclusion/Implication: vNOTES bilateral salpingo-oophorectomy is a minimally invasive surgical technique that can be a safe and effective option for premenopausal women with breast cancer who require ovarian suppression. This approach can help reduce postoperative pain and improve recovery times, which can be especially beneficial for patients with advanced stage disease who may have additional treatment needs. Further studies are needed to fully evaluate the long-term outcomes of this technique, but initial results are promising.



SF020 / #286

Topic: AS18. Surgical Techniques and Perioperative Management

SURGICAL APPROACH TO CERVICAL CANCER AND CONSIDERATIONS FOR NERVE SPARING RADICAL HYSTERECTOMY

<u>Aaron Praiss</u>, Mario Leitao, Sarah Kim, Bill Zammarrelli, Nadeem Abu-Rustum, Yukio Sonoda Memorial Sloan Kettering Cancer Center, Gynecology Service, Department Of Surgery, New York, United States of America

Introduction: In this surgical film, our objective is to review the surgical approach to cervical cancer with a focus on nerve sparing radical hysterectomies. We aim to review specific surgical techniques and considerations for both abdominal and minimally invasive techniques.

Description: In today's video we will review the surgical approach to cervical cancer with a focus on nerve sparing radical hysterectomies. It is important to note that performing a nerve sparing radical hysterectomy does not detract from the radicality of the procedure, but rather describes the technique employed to carefully dissect and preserve the autonomic nerves of the pelvis. Radicality, rather, is determined by the resection of ventral, dorsal, and lateral parametrium. This surgical film will outline the surgical techniques of nerve sparing radical hysterectomy and considerations for abdominal and miminally invasive routes of surgery. Footage is obtained from various cases.

Conclusion/Implications: Radical hysterectomy is not just one type of surgery, but rather includes a spectrum of types of resections that balance curative effect with adverse postoperative consequences. Considerations for radical hysterectomy include review of the updated radical hysterectomy system, dissection and identification of key artifical spaces of the pelvis, and use of a laparoscopiic vessel sealing device for abdominal surgeries. Importantly, sentinel lymph node mapping can be utilized in early stage cervical cancer with side specific pelvic lymph node dissection performed for unsuccessful mapping. Lastly, use of a Wertheim clamp or minimally invasive stapling device to prevent spill of cervical cancer cells intra-peritoneally is crucial in this oncologic procedure.



SF021 / #628

Topic: AS18. Surgical Techniques and Perioperative Management

ROBOTIC-ASSISTED LAPAROSCOPIC TECHNIQUE FOR SPLENECTOMY AND PERICOLONIC TUMOR REMOVAL IN A PATIENT WITH RECURRENT OVARIAN CANCER

Eric Rios-Doria¹, Talayeh Ghezelayagh¹, Kathryn Mcnevin², James Park², Heidi Gray¹
¹University of Washington Medical Center, Division Of Gynecologic Oncology, Department Of Obstetrics And Gynecology, Seattle, United States of America, ²University of Washington, Division Of Hepatobiliary Surgical Oncology, Department Of Surgery, Seattle, United States of America

Introduction: The patient is a 64 year-old individual with germline BRCA^{wt} status and recurrent ovarian cancer status post second-line treatment. She presented with increasing growths in her spleen and along the descending colon. We outline a robotic-assisted laparoscopic splenectomy and tumor implant removal performed by a multidisciplinary team of gynecologic oncologists and surgical oncologists.

Description: Laparoscopic access was acquired using 12-mm AirSeal device followed by four 8-mm robotic trocars. The surgical field of view of interest was achieved by placing the patient in reverse Trendelenburg with a partial right lateral decubitus position. Due to the patient's prior omentectomy, there was optimal visualization of the splenic ligaments and vasculature. Hem-a-lock clips were applied on the splenic vessels upon skeletonization, which were sealed and divided with the robotic vessel sealer. The pericolonic tumor had dense adhesions to the mesentery of the descending colon which disallowed its complete removal. This did not affect the patient's disease course due to existing abdominal miliary disease. There were no intraoperative or postoperative complications, and the patient was discharged on postoperative day 1. Her pathology returned with metastatic carcinoma consistent with her primary diagnosis.

Conclusion/Implications: This video shows the feasibility of a robotic-assisted laparoscopic splenectomy with tumor implant removal in recurrent ovarian carcinoma. A multi-disciplinary approach with surgical colleagues may offer improved patient benefit.



SF022 / #82

Topic: AS18. Surgical Techniques and Perioperative Management

ROBOTIC-ASSISTED LAPAROSCOPIC SURGERY FOR EARLY-STAGE ENDOMETRIAL CANCER WITH SENTINEL LYMPH NODE BIOPSY USING INDOCYANINE GREEN AND NEAR-INFRARED IMAGING IN A PATIENT WITH MORBID OBESITY

<u>Pacharadol Taweerat</u>, Athithan Rattanaburi, Yuthasak Suphasynth Prince of Songkla University, Department Of Obstetrics And Gynecology, Faculty Of Medicine, Hat Yai ,Songkhla, Thailand

Introduction: Obesity is increasing worldwide and has been associated with the development of endometrial cancer. Minimally invasive surgery in early-stage endometrial cancer with sentinel lymph node (SLN) biopsy provides superior surgical benefits over laparotomy without impairing oncological outcomes. Moreover, robotic-assisted laparoscopic surgery (RALS) is an attractive option for morbidly obese patients with several advantages over conventional laparoscopy. This video demonstrated preand intra-operative preparations, SLN biopsy using indocyanine green (ICG) with near-infrared (NIR) imaging, and hysterectomy technique by RALS in a morbidly obese patient.

Description: We present a morbidly obese patient with a body weight of 127 kg and a BMI of 47 kg/m². She was preoperatively diagnosed with early-stage endometrial carcinoma. The surgical anatomy from the CT scan was evaluated for extrauterine disease and to determine the accurate primary port insertion on the truncal adiposity. We also provided essential attention to patient positioning, maximal allowable steep head-down tilt, and the effect of pneumoperitoneum before starting the procedure to minimize the risk of complications. We injected ICG into the cervix before port placement and used NIR imaging to guide the SLN removal. The step-by-step hysterectomy and SNL biopsy by RALS were performed in a tertiary care academic center.

Conclusion/Implications: RALS for early-stage endometrial cancer with SLN biopsy using ICG and NIR imaging in a patient with morbid obesity shows that it is feasible and should be widely introduced as a management option in Thailand. In addition, adequate preoperative and intraoperative preparations in patients with morbid obesity are also essential in achieving favorable outcomes.



SF023 / #181

Topic: AS22. Vulvar and Vaginal Cancer

SENTINEL LYMPH NODE BIOPSY WITH TECHNETIUM-99M AND FLUORESCENCE INDOCYANINE GREEN FOR VULVAR CANCER

<u>Isabel Bernal</u>¹, Esther Yoon², Munir Patel³, Martin Newman³, Joel Cardenas⁴

¹Nova Southeastern University, Osteopathic Medicine, Fort Lauderdale, United States of America, ²Cleveland Clinic, Laboratory Medicine, Weston, United States of America, ³Cleveland Clinic, Plastic And Reconstructive Surgery, Weston, United States of America, ⁴Cleveland Clinic, Gynecology Oncology, Coral Springs, United States of America

Introduction: The surgical management of vulvar cancer has been evolving. Standard inguino-femoral lymphadenectomy (IFL) is associated with significant postoperative morbidity and lymphedema. Current guidelines suggest performing a sentinel lymph node biopsy with Technetium-99m (Tc99) and blue dye. With the introduction of fluorescence in surgery, the use of indocyanine green (ICG) appears to have a role in improving the detection rate of sentinel lymph nodes. We present a case of sentinel lymph node biopsy with Tc-99 and ICG.

Description: 70 yo female with 3-cm vulvar squamous cell carcinoma in the posterior fourchette of the vulva. Physical exam and PET CT scan did not show abnormal groin lymph nodes or distant metastasis. Patient underwent partial radical vulvectomy with sentinel lymph node biopsy with Tc-99 and ICG. Two right sentinel lymph node and one left sentinel lymph node was identified. The post-operative course was unremarkable.

Conclusion/Implications: Sentinel lymph node biopsy for vulvar cancer with Tc-99 and ICG appears feasible and may increase the detection rate of micro metastasis. ICG is an alternative to blue dye.



SF024 / #183

Topic: AS22. Vulvar and Vaginal Cancer

SENTINEL LYMPH NODE BIOPSY WITH TECHNETIUM-99M AND FLUORESCENCE INDOCYANINE GREEN FOR MALIGNANT VULVAR MELANOMA.

<u>Isabel Bernal</u>¹, Esther Yoon², Mayo Hotta³, Martin Newman³, Joel Cardenas⁴

¹Nova Southeastern University, Osteopathic Medicine, Fort Lauderdale, United States of America, ²Cleveland Clinic, Laboratory Medicine, Weston, United States of America, ³Cleveland Clinic, Plastic And Reconstructive Surgery, Weston, United States of America, ⁴Cleveland Clinic, Gynecology Oncology, Coral Springs, United States of America

Introduction: The surgical management of vulvar cancer has been evolving. Standard inguino-femoral lymphadenectomy (IFL) is associated with significant postoperative morbidity and lymphedema. Current guidelines recommend sentinel lymph node biopsy with Technetium-99m (Tc99) and blue dye. With the introduction of fluorescence in surgery, the use of indocyanine green (ICG) appears to have a role in improving the detection rate of sentinel lymph nodes. We present a case of sentinel lymph node biopsy with Tc-99 and ICG.

Description: Sixty-five yo female with a BMI of 47.50 Kg/m2 presented with vulvar biopsy that showed Stage 2b malignant vulvar melanoma. Physical exam showed two black 5-mm lesions in the mons. PET CT scan did not show abnormal groin lymph nodes or distant metastasis. Underwent radical vulvectomy with Bilateral Inguino-femoral sentinel lymph node biopsy with Tc99 and Indocyanine green (ICG). Preoperative lymphoscintigraphy detected bilateral groin lymph node. During surgery, ICG (25 grams/diluted in 10 ml sterile water) was injected intradermally at the leading edge of the lesion.

Conclusion/Implications: Pathology showed one left groin sentinel node with 7 mm metastatic disease. One out of four right groin sentinel node biopsy showed 1 mm disease. All surgical margins were negative for invasive melanoma. The final pathology was pT2a pN2. Sentinel lymph node biopsy with Tc-99 and ICG appears feasible and may increase the detection rate of micrometastasis. ICG is an alternative to blue dye.