

PREOPERATIVE DIAGNOSES,1. Incomplete surgical staging of recent diagnosis of grade 1 endometrial adenocarcinoma and also low-grade mesothelioma of the ovary.,2. Status post laparoscopic-assisted vaginal hysterectomy with bilateral salpingo-oophorectomy.,POSTOPERATIVE DIAGNOSES,1. Incomplete surgical staging of recent diagnosis of grade 1 endometrial adenocarcinoma and also low-grade mesothelioma of the ovary.,2. Status post laparoscopic-assisted vaginal hysterectomy with bilateral salpingo-oophorectomy.,OPERATIONS PERFORMED,1. Robotic-assisted omentectomy.,2. Robotic-assisted pelvic lymph node dissection.,3. Attempted laparoscopy.,4. Exploratory laparotomy with bilateral pelvic bilateral periaortic lymph node dissection with multiple biopsies.,ANESTHESIA:, General/epidural anesthesia.,ESTIMATED BLOOD LOSS:, 200 mL.,COMPLICATIONS:, None.,FINAL SPONGE AND NEEDLE COUNTS: , Correct, confirmed by x-ray JP drain x1.,INDICATIONS FOR SURGERY: , Mrs. A is a pleasant 66-year-old female who was diagnosed with an unsuspected grade 1 endometrial adenocarcinoma and low-grade mesothelioma of the ovary. The patient is status post laparoscopic-assisted vaginal hysterectomy BSO. The patient was referred to me by Dr. X. Because of the incomplete staging, the patient was advised to undergo a robotic-assisted surgical staging. Risks, benefits, and rationale of these procedures were reviewed. The patient has understanding of these risks and wishes to proceed with the surgery as planned.,INTRAOPERATIVE FINDINGS,1. No evidence of

ascites.,2. At the time of the exploratory laparotomy, the diaphragm was well palpated. They were clear. The low attachments were removed. The lesser omentum was unremarkable. The pancreas, spleen, and liver were unremarkable. The gallbladder was unremarkable. The stomach appeared grossly normal. The small bowel was inspected from the ligament which starts to the ileocecal valve. There is no evidence of disease. Paracolic gutter and peritoneum was free. The omentum was grossly normal.,3. In the pelvis, uterus, tubes, and ovaries were absent. There was no evidence seeding along the bladder, pelvic, cul-de-sac, and peritoneum.,4. Retroperitoneally, pelvic lymph nodes were mostly normal; however, at the right aortic, there are nodes. These nodes were extremely fibrotic and they were densely adherent to the anterior wall of the vena cava which precluded me from performing a robotic periaortic lymph node dissection. There was some area that was suspicious right at the low right periaortic lymph node. They were sent for frozen section and they came back as benign. It is unclear to me why did the lymph nodes were quite fibrotic and firm, but we will wait for the pathology report.,PROCEDURE IN DETAIL: , The patient was given IV antibiotics prior to our incision site, sequential compression device was placed as part of the DVT prophylaxis. I have requested an epidural catheter be placed for purpose of the periaortic lymph node dissection. With this in mind, we proceeded as such.,We initially began with the robotic portion of the procedure.,A 1-cm supraumbilical incision made. A Veress needle was inserted without difficulty.

Pneumoperitoneum was achieved to the abdominal pressure of 15 mmHg. A 12mm trocar was inserted without difficulty. After completion of this, a 12mm trocar was placed in the left lower quadrant 2 fingerbreadths medial to the anterior superior iliac spine under direct laparoscopic visualization. After completion of this, a laparoscope was then placed in the left lower quadrant port to assist in the placement of the remainder of the da Vinci ports. Two 8-mm ports were placed in the right upper quadrant 8 cm apart while one 8-mm port was placed in the left upper quadrant 8 cm apart. After completion of this, the patient was placed in steep Trendelenburg position. The robotic system was then docked and after docking the robotic system, the instrumentation was inserted under direct laparoscopic visualization to ensure that there was no injury to the abdominal contents. Once this was completed, the robotic camera was then docked. We then proceeded with our daVinci portion of the procedure.,I then proceeded now with the omentectomy. The omentum was taken off the transverse colon with the harmonic scalpel. The entire omentum was removed and placed in the pelvis. After completion of this, I then proceeded now with the pelvic lymph node dissection.,An incision was made parallel along the peritoneum overlying the psoas muscle. All the lymph node bearing tissues along the external iliac artery and vein were subsequently skeletonized off the vessels and resected. The lymph node bearing tissues interposed between the external iliac vein and psoas muscle were mobilized into the obturator fossa and subsequently removed off the accessory obturator

vein, artery and nerve. In the process of removing the lymphoid tissues, the genitofemoral nerve along with the accessory obturator vein, obturator artery and nerve were all preserved. The lymphoid tissues interposed between the external iliac vein and psoas muscle along with the common iliac vessels were also subsequently removed. The lymph node bearing tissues bifurcating at the hypogastric and the external iliac vein were likewise removed in addition to the hypogastric lymph nodes. All the lymph node tissues were placed in an Endobag and removed and submitted as pelvic nodes on the right side and subsequently the left side.

Boundaries of the pelvic nodal dissection distally were the external circumflex iliac vein, laterally the psoas muscle along with the obturator internus fascia, medially the superior vesical artery along with the ureter, and inferiorly below the obturator nerve. At this point in time, we have attempted the periaortic lymph node dissection. I did open up the peritoneum overlying the bifurcation of the aorta. This peritoneum was incised up to the level of the duodenal recess. It was at this point in time that the periaortic lymph node dissection was extremely difficult. I was unable to get a tissue plane as the lymph nodes were apparently very fibrotic. I was concerned that I would tear off the anterior wall of the cava in the process of trying to perform the right periaortic lymph node. For this reason, I aborted the robotic procedure or in after nearly attempting for about an hour and a half for the periaortic lymph nodes. Once this was unsuccessful, the robotic system was then dedocked. I then placed additional

ports. A 5-mm port was placed in the suprapubic region, two fingerbreadths above. A right lower quadrant 12-mm port was placed. After completion of this, I had attempted to see whether we could do the remainder of the periaortic lymph node dissection via laparoscopically. Despite an attempt for a nearly 35 minutes, I was not able to get adequate exposure. The small bowel kept on falling in the operative field which precluded us to perform the procedure safely. For this reason, I converted to an open procedure. A midline incision was made from suprapubic bone and extended above the umbilicus. The abdominal cavity was entered without injuring the bowel. After entering the abdomen, omentum was removed. Ray-Tec sponges were removed. We covered for the Ray-Tec sponges. After completion of this, Thompson retractor was placed. The patient was placed in C-Trendelenburg position. The bowel was packed cephalad. Retroperitoneum space was entered right and left ureters were identified. I then meticulously resected the lymphoid-bearing tissues anterior and lateral to the cava. This dissection was quite difficult as the lymph nodes were extremely fibrotic and adherent to the caval wall. I was able to freed up these lymph nodes without injuring of the cava. Likewise, the left periaortic lymph node dissection was carried out from the level of the bifurcation to 1 cm above the IMA. All the periaortic lymph node dissection was then carried out. After completion of this, I then took washings. Random biopsies were obtained of the cul-de-sac and right and left pelvic side wall along with the right and left paracolic gutter. After completion of this, the patient appears

to have tolerated the procedure well. There was no obvious gross disease. The bowel was inspected meticulously to ensure that there was no evidence of injury. Once this was completed, the bowel was placed back to its normal position. Several film solutions were placed. We counted for sponges, needles, and instruments. Once this was counted for, the fascia was then closed with #2 Vicryl suture in a mass closure fashion. The subcutaneous route was copiously irrigated with water. The JP drain was brought to the right lower quadrant incision. All the incision ports were then closed with 3-0 Monocryl suture. Likewise, the midline incision was closed with 3-0 Monocryl sutures. At the conclusion of the procedure, there was no obvious gross disease left.