

Treatment of Endometrial Cancer in Patient with Malignant Obesity

Miroslav D. Popovic, Arnela Cerić Banicević, Biljana Popović, Amela Cerić, Andrija Banicević, Danijela Popadić

Department of Obstetrics and Gynecology, Clinical Center of Banja Luka, Bosnia and Herzegovina

Corresponding author: Miroslav D. Popovic, MD, Msc., gynecologist-oncologist, Head of Surgical-Oncology Department of the Clinic of Obstetrics and Gynecology, Clinical Center Banja Luka, Trive Amelice 30/3, Banja Luka, Bosnia and Herzegovina. Phone: +387 (0)51/342-204, Mob:+387 (0)65/188-888. E-mail : drpopovic.gin1@gmail.com; drpopovic.gin@blic.net

ABSTRACT

Our 60-year-old patient menarche in 13-year, two delivery, last menstruation in 53-year, without uterine bleeding or any kind of symptomatology. The gynecological transvaginal ultrasound examination showed hyperplasia endometrii (20mm). After curettage, pathological examination was diagnostic polypus carcinomatoides. The patient with HTA and obesity was admitted to and operated on at the Gynecological Department due to endometrial carcinoma (FIGO stage IA1). Because of her giant obesity, **BMI – 71.50 kg/m², weight 219 kg and height 175cm**, surgery by the abdominal approach was very difficult to perform, so vaginal hysterectomy was carried out. The procedure was completed within 127 minutes without any intraoperative complications. Blood loss was less than 100ml. The patient was discharged on postoperative day 7. The patient was followed up for 6 months after surgery. No complications or recurrence were reported during the 6-month follow up.

Key words: cancer, endometrium, obesity, treatment

1. INTRODUCTION

Endometrial cancer is the most common malignant tumor of the genital organs in women. Typical symptoms are the postmenopausal bleeding or metrorrhagia (1). After the history, clinical examination and transvaginal sonography, histological confirmation is obtained through dilatation and curettage. The most important risk factors for endometrial cancer are obesity (BMI > or = 25 kg/m²) and unbalanced use of estrogen therapy (2). Other factors include lack of physical activity, blood pressure above 140/90 mmHg, and a high concentration of glucose in the blood (3). In 75 % of cases the diagnosis is made at an early stage, which is associated with good results in terms of survival from this disease (4). Appropriate surgery in patients with a diagnosis of endometrial cancer is a classic abdominal hysterectomy with adnexectomy and pelvic lymphadenectomy. Basic surgical treatment is sometimes difficult to perform in obese women (BMI > or = 50 kg/m²) and is associated with poor access and limited visibility, mainly in the area of the bottom of the pelvis (5).

2. MATERIALS AND METHODS

Our 60-year-old with weight of 219 kilograms, BMI–71.50 kg/m², height 175cm and had first menarche at the age of 13, two vaginal births, the last menstrual period in at the 53 year of life, and without uterine bleeding or any gynecological symptomatology. From comorbid diseases patients had only a secondary severe hypertension that is controlled by antihypertensive drugs.

At regular gynecological examination was performed gynecological transvaginal ultrasound that showed endometrial hyperplasia (20mm). After curettage, curettage specimen and histopathologic examination, the diagnosis was: Ca endomet-

rii–polypus carcinomatoides. At the consilium for gynecological malignancies of the Clinical Center Banja Luka, it was decided that the patient should undergo surgery in form of hysterectomy and bilateral adnexectomy.

Preoperative preparation was carried out at the Clinic of Internal Diseases, Clinical Center in Banja Luka. In consideration were three variants of surgery, transabdominal approach, which was the last option due to difficult access and possible large intra and postoperative complications and severe wound on anterior abdominal wall. Also considered was laparoscopic-assisted vaginal hysterectomy LAVH that is also performed at our clinic, but was abandoned because of the lack of adequate instrument for such an approach for this patient, and above all long enough Wers needle and ports and also because of anesthesiological risk due to increased intra-abdominal pressure due to insufflation of pneumoperitoneum with CO₂. Vaginal hysterectomy remains an option, although it was associated with large intraoperative risk, because there was no deterioration of gynecological organs and was technically very demanding. Uncertain was the adnexectomy, which is in case of cancer at the uterine corpus required for 10% of metastases to the ovaries, but we decided to surgical treatment and vaginal approach is primarily due to the expected poor results of radiotherapy in this case.

After serious anesthesia preparation and obtaining adequate instruments and operating table, patient underwent vaginal hysterectomy with bilateral adnexectomy (Figures 13,14,15). The operation was completed within 127 minutes, using ligatures without ligation ligaments, practically with only one seam, which closed vagina, without any intraoperative complications, blood loss was less than 100ml. The presence of a vaginal drains



Figure 1. Preparation for surgical procedure



Figure 2. Vaginal position of the patient

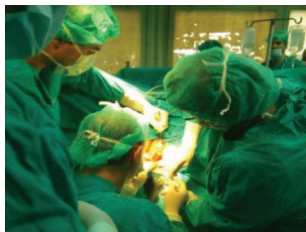


Figure 3. Positioning of the surgical team

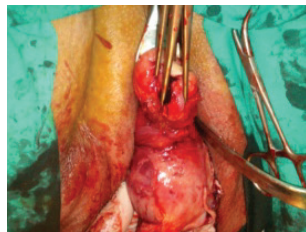


Figure 6. Uterus

(Figure 16) in which the first three days was about 400 ml bloody content, and the fourth day stopped the secretion after which the drain was removed. On the fourth day the patient got pain in the abdomen with a picture of paralytic ileus and typical aero liquid levels on the native X-rays of the abdomen, which was treated conservatively.

3. RESULTS

The patient was discharged on the tenth postoperative day to home care with normal vital parameters of the general condition and was followed every month during the next six months postoperatively without complications. Definitive histopathological examination determined to be a FIGO stage IA1 endometrial cancer. At consilium was decided that patients receive four cycles of postoperative brachytherapy. At six-month follow-up period there were no recurrences or complications related to surgery so that the patient returned to normal life activities.

4. DISCUSSION

Vaginal hysterectomy is an operation that removes the uterus vaginally. The goal of surgery is the surgical removal of the uterus with or without extirpation of the adnexes in more favorable conditions vaginally that can used number of advantages which in certain situations makes a vaginal approach in relation to the abdominal superior. Vaginal route for uterus removal enters into practice at the end of the last century, when the possibility of infection in abdominal surgery was more common and infection itself was much more dangerous. But today, the benefits of this route are preserved, so for example, trauma during vaginal surgery in general is lower, because the anterior abdominal wall is not dissected, then the surgery itself is of relatively short duration, bleeding in a careful and correct surgery is minimal and postoperative complications are easier and more rare, patients may earlier be mobilized and stand, and the postoperative complications and in terms of circulatory disorders, and thromboembolic pulmonary disorders are more rare and less severe. As the anterior abdominal wall is not dissected, postoperative pain is somewhat weaker and more bearable, without relative risk of wound dehiscence, creating a hernia, and postoperative hernia, while the aesthetic effect is very advantageous because the operative scar cannot be seen (6). Experienced and skilful surgeon, do not mind the relatively confined space and favorable circumstance is that with Suhart incision through the perineum can be expanded. Vaginal hysterectomy in case of endometrial cancer is applied at the initial stage, and most often used in extremely obese patients, as in case of our patient and in patients who have other diseases that increase the risk of surgery, or in patients with prolapse of the uterus. Lacks of surgical procedures are that sometimes it is technically difficult to perform bilateral adnexectomy and cannot be done either excision of the lymph glands (7). Accordingly vaginal hysterectomy is reserved for pa-

tients with high risk of abdominal surgery, for patients with low risk of extra uterine spread of the disease or at the initial stage of well differentiated tumors at the corpus of the uterus. Obesity is associated with several co-morbidities such as diabetes, hypertension, hyperlipidemia and obstructive sleep apnea. It is also known that obese patients have an increased risk of several types of cancer, as kidney, pancreatic, endometrial, breast and others. Gynecology surgeon must keep in mind the risk of treatment of such patients and be aware of the problems that may arise in the course, during the surgery and the postoperative period. Morbid obesity is associated with poorer quality of life in patients with endometrium cancer (8). Numerous studies confirm that BMI was not an independent risk factor for EC, however, significantly influence the treatment outcome (9). Obesity increases blood loss and surgery duration, but does not affect the length of hospital stay, number of lymph nodes, or perioperative complications (10). However, this does not apply to malignant obesity as was the case in our patient with a BMI of more than 75. Endometrial cancer is a disease that in about 70% of cases is diagnosed in the first and second stage. Vaginal hysterectomy is an alternative to the traditional treatment of endometrial cancer and a large number of studies suggest a number of advantages compared to abdominal approach due to lower complication rates, and especially low rate of infections and faster postoperative recovery (11). By literature search, we found that the heaviest patient patients with carcinoma of the uterine corpus had a BMI of 55.0 kg/m² which was performed by LAVH.

5. CONCLUSION

Vaginal hysterectomy is a reasonable method of treatment in patients with endometrial carcinoma associated with malignant obesity.

CONFLICT OF INTEREST: NONE DECLARED

REFERENCES

1. Smits A1, Lopes A2, Das N2, Bekkers R3, Galaal K4. The impact of BMI on quality of life in obese endometrial cancer survivors: Does size matter? *Gynecol Oncol.* 2014 Jan;132(1):137-41.
2. Bittoni MA, Fisher JL, Fowler JM, Maxwell GL, Paskett ED. Assessment of the effects of severe obesity and lifestyle risk factors on stage of endometrial cancer. *Cancer Epidemiol Biomarkers Prev.* 2013 Jan;22(1):76-81.
3. Farthing A, Chatterjee J, Joglekar-Pai P, Dorney E, Ghaem-Maghani S. Total laparoscopic hysterectomy for early stage endometrial cancer in obese and morbidly obese women. *J Obstet Gynaecol.* 2012 Aug;32(6):580-4.
4. Santoso JT, Barton G, Riedley-Malone S, Wan JY. Obesity and perioperative outcomes in endometrial cancer surgery. *Arch Gynecol Obstet.* 2012 Apr;285(4):1139-44. doi: 10.1007/s00404-011-2116-2. Epub 2011 Oct 22.
5. Samulak D, Michalska M, Wilczak M, Pieta B, Sajdak S. Vaginal hysterectomy aided with surgery by the abdominal approach as a method of hysterectomy with salpingo-oophorectomy due to endometrial carcinoma in a woman with morbid obesity. Case report. *Eur J Gynaecol Oncol.* 2010;31(4):475-7.