

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

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Summary

The most important risk factors of endometrial carcinoma are fat consumption, obesity (BMI ≥ 25 kg/m²) and use of unbalanced estrogen therapy. Other factors include lack of physical activity, a high-calorie diet, arterial blood pressure above 140/90 mmHg and high concentrations of glucose in the blood. The basic treatment in cases of endometrial carcinoma is surgery including hysterectomy with salpingo-oophorectomy and complete interoperational assessment of the development degree of the disease. Basic operational treatment is difficult as far as obese women are concerned (BMI ≥ 50 kg/m²). This is linked with poor access to operated tissues and limited visibility, mainly in the area of the bottom of the pelvis minor. Our 69-year-old patient was admitted to and operated on at the Gynecological Department due to endometrial carcinoma. Because of her giant obesity, BMI – 51.30 kg/m², surgery by the abdominal approach was very difficult to perform, so vaginal hysterectomy with salpingo-oophorectomy was carried out.

Key words: Endometrial carcinoma; Vaginal hysterectomy; Giant obesity.

Introduction

Endometrial carcinoma is the fourth most frequent malignant neoplasm among women in Poland. Most often this refers to women in postmenopausal age in whom the most important risk factors are fat consumption, obesity (BMI ≥ 25 kg/m²) and use of unbalanced estrogen therapy [1-6]. Other factors include lack of physical activity, a high-calorie diet, arterial blood pressure above 140/90 mmHg and high concentrations of glucose in the blood [7-9]. It was proven that maintaining a correct body weight and an active lifestyle might significantly decrease the risk of development of endometrial carcinoma [10]. In 90% of cases irregular bleeding, usually six months after menopause, is a symptom suggesting neoplastic changes within the endometrium. Such states require a broader diagnostic process – collection of material from the cervical canal and uterine cavity to the histopathological examination [11]. After receiving the result indicating endometrial carcinoma it is necessary to start the treatment process which is based on surgery including hysterectomy with salpingo-oophorectomy, and a complete interoperational assessment of the degree of development of the disease, especially in case of suspicion that this neoplasm has spread beyond the uterus [1, 12, 13].

Case Report

The patient, aged 69, was admitted to the Gynecological Department on November 7, 2007 because of the earlier diagnosed endometrial carcinoma.

In October 2007 due to the occurrence of bleeding after menopause and thickened (18.6 mm) endometrium at the transvaginal ultrasonographic examination (TVS), hysteroscopy was conducted. During the endoscopic examination a significantly thickened, uneven and hyperemic endometrium and hyperemic endocervix were found. The result of the histopathological examination of the collected material from the cervical canal and uterine cavity was as follows: endometrial adenocarcinoma.

When interviewed, the patient did not report any ailments or systemic diseases. She has been operated on ten years before for cholecystectomy due to cholecystolithiasis.

The first menstruation was at the age of 14 with regular cycles every 28 days, lasting three to four days. The patient had given birth twice (the second delivery was with a forceps). The last menstruation was at the age of 55. There was no remarkable family history.

Physical examination showed morbid obesity, BMI – 51.30 kg/m² (height 141 cm, weight 102 kg, circumference of the abdomen 130 cm, thickness of fatty tissue 21 cm). Efficient circulation and respiration were noted.

The results of the diagnostic examinations were within normal limits.

TVS examination showed the body of the uterus in anteflexion measuring 44.5 x 39 mm. The central part of the body of the uterus was filled with a heteroechoic change of uneven contour measuring 19.7 x 14.4 mm. The muscular layer on the back wall of the uterus was 5.5 mm thick, while the muscular layer on the front wall was 10 mm thick. The echostructure of both appendages appeared normal but the examination was difficult to carry out due to morbid obesity.

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The patient did not agree to be moved to a higher level health care facility.

Due to life indications a decision was made to begin surgical treatment and the patient was qualified for hysterectomy with salpingo-oophorectomy by the abdominal approach.

Description of the surgery: the abdomen was opened by a longitudinal cut parallel to the medial body line. Due to morbid obesity and very difficult operational conditions, the surgical team refrained from removing the lymph nodes. Hysterectomy with salpingo-oophorectomy led to the stage of ligation and amputation of infundibular-pelvic ligaments in a typical way. Due to the lack of possibility to continue the surgery via the abdominal approach, a decision was made to finish the operation via the vaginal approach. After preparing the surgical area, the following was found during the speculum examination: the vagina was long and regressive, while the cervix was small, high-located, and unattainable. Vaginal hysterectomy with a suture laid around the vagina was performed. After that, peritonization was carried out from the side of the abdominal cavity. A redon drain was inserted in the recto-uterine fold. Layer suturing of the abdominal integuments was done and a drain was placed in subcutaneous tissue. Urine in the catheter was clear. The patient's general condition after the surgery was good.

The postoperational course with difficult healing of wounds was related to obesity. The patient was discharged from hospital on the 11th day after surgery in good general condition with a recommendation of periodic controls in the Gynecological Department.

Two weeks later the final result of the histopathological test was obtained: adenocarcinoma of the endometrium, partially tubular and partially papillary. Predominating tissue with differentiation (G1), but focally fields of differentiation (G2) were found. Malignant infiltration included over half of the thickness of the myometrium and passed to the cervical canal, (pT2b). The parametrium and appendages were free from malignant infiltration.

The patient was consulted in the Oncological Clinic about continuing treatment. Currently, she is in good condition and is subject to periodic oncological controls.

Discussion

Surgical treatment of endometrial carcinoma includes, apart from hysterectomy with salpingo-oophorectomy and removal of the vaginal vault, removal of the pelvic and periaortic lymph nodes as a method of surgical assessment of the progression of endometrial carcinoma. Lymphadenectomy has a therapeutic meaning, which is proven by the results of retrospective tests [14-16], but also a diagnostic meaning that enables the assessment of the necessity and scope of the postoperational treatment. Such a proceeding is recommended in the majority of patients suffering from endometrial carcinoma but it has not been commonly accepted [17, 18]. Many researchers claim that as far as women with a low level of progression of carcinoma are concerned, an operation without lymphadenectomy should be carried out because these women are unnecessarily exposed to possible complications and death after radical surgery. Factors that qualify patients to a low-risk group include limitation of the neoplasm to the body of the uterus, histological malignancy degree 1 or 2, endometrial subtype of the neoplasm and

infiltration of the myometrium not exceeding 50% [12, 19, 20]. The assessment of these factors should be carried out interoperationally and, according to Mariani *et al.* [21], in women from the low-risk group, infiltration of lymph nodes or relapse of the disease are not found. In cases of more advanced disease further treatment is required depending on the degree of progression, e.g., radiotherapy or chemotherapy. Currently there are recommendations to base the postoperational treatment on the characteristics of the tumor, defining possibilities of spread of the neoplasm and not on a traditional method [22].

The situation looks different in women who cannot be operated on due to other medical contraindications. These women are recommended to have full radiotherapy, which enables a satisfactory local control of the tumor and 5-year survival rate.

Basic operational treatment of endometrial carcinoma is difficult as far as obese women are concerned (BMI ≥ 50 kg/m²). This is linked to bad access to operated tissues and limited visibility, mainly in the area of the bottom of the pelvis minor. Hysterectomy with salpingo-oophorectomy and removal of the vaginal vault, and all the more removal of the pelvic lymph nodes, were very difficult in the case of our patient and required the operation to be finished via the vaginal approach. Macroscopic and palpable assessment of the organs and lymph nodes, lack of possibility of a precise interoperational assessment of the progression of the neoplasm as well as exceptionally difficult conditions caused by obesity made the operational team retract from the removal of the lymph nodes. Due to the fact that the final result of the histopathological examination indicated Stage IIB of progression according to FIGO and the lymph nodes were not removed, the patient was treated as a patient from the non-operational group and full radiotherapy treatment was recommended.

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