

Laparoscopic excision of pelvic lymph nodes after vaginal hysterectomy due to histological blunder. Case report of two patients

Laparoskopowe usunięcie węzłów chłonnych miednicy po histerektomii przezpochwowej z powodu niezgodności rozpoznań histopatologicznych. Analiza dwóch przypadków

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Summary

The analysis included two patients who were treated in the First Department of Gynaecology and Obstetrics CMKP in Warsaw. Vaginal hysterectomy was performed because of the diagnosis of atypical endometrial hyperplasia complex. Both studies were performed on an outpatient basis. In the final histological results the endometrial cancers were found: in the first case G2 endometrial cancer, in the second one clear cell carcinoma. Patients were re-admitted to the clinic and pre-qualified for the extension of hysterectomies performed with laparoscopic lymphadenectomy of the ilio-obturator area and removal of the parametrium and part of the vagina vault. Patients were submitted for further consultation and treatment at the Cancer Centre.

Key words: endometrial cancer, vaginal hysterectomy, laparoscopy, lymphadenectomy.

Streszczenie

Analizie poddano dwie pacjentki leczone w I Klinice Ginekologii i Położnictwa CMKP w roku 2010 i 2011, u których wykonano przezpochwowe wycięcie macicy z powodu rozpoznania w przedoperacyjnym badaniu histopatologicznym rozrostu złożonego atypowego endometrium. Oba badania wykonano ambulatoryjnie. Po otrzymaniu ostatecznych wyników histopatologicznych u pacjentek stwierdzono raka endometrium – w pierwszym przypadku był to rak endometrialny G2, w drugim przypadku rak jasnokomórkowy. Pacjentki zostały ponownie przyjęte do Kliniki i zakwalifikowane do poszerzenia wcześniej wykonanej histerektomii o laparoskopową limfadenektomię biodrowo-zastonową oraz wycięcie przymacic i fragmentu kikuta pochwy. Po zabiegu pacjentki skierowano na dalsze konsultacje i leczenie w Centrum Onkologii.

Słowa kluczowe: rak endometrium, przezpochwowe wycięcie macicy, laparoscopia, limfadenektomia.

Introduction

Endometrial cancer is the most common genital cancer in women in developed countries. The mean age of diagnosis of endometrial cancer is 60 years. A distinction is made between the existence of two types of endometrial cancer. Type I (endometrioid, 80-90%) represents oestrogen-dependent tumours responding to treatment with progestogens. It is associated with good prognosis (total 5-year survival 75-85%). Type II (non-endome-

trioid, 10-20%) may be independent from the unrestrained oestrogen stimulation. Tumours of type II are poorly differentiated, aggressive histologically (carcinoma, papillary serous) and are associated with a lower total 5-year survival (35%) [1].

Most patients can be diagnosed at an early stage of the disease. Often, the first manifestation is abnormal vaginal bleeding, especially in postmenopausal women. Bleeding is diagnosed with fractional curettage or aspiration biopsy [3]. In the histological study 70% of results are benign lesions, 15% endometrial hyperplasia

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and in 15% endometrial cancer is diagnosed. Endometrial hyperplasia is an important risk factor for endometrial cancer. There are four histological types of endometrial hyperplasia: simple hyperplasia, complex hyperplasia, simple hyperplasia with atypia and complex hyperplasia with atypia. In diagnosis of complex hyperplasia with atypia there is a possibility of progression to endometrial carcinoma or coexistence of endometrial cancer. Numerous studies have shown that the risk of coexistence of complex endometrial hyperplasia and endometrial cancer is high and may reach 20-50% of cases [2, 3]. This risk must be taken into account when considering therapeutic options. Complex hyperplasia with atypia, confirmed in the final pathological examination after hysterectomy, requires no further treatment [4]. The minimal procedure in endometrial cancer is total hysterectomy with ovaries and fallopian tubes (by laparotomy, vaginal hysterectomy, laparoscopic assistant vaginal hysterectomy (LAVH), total laparoscopic hysterectomy (TLH). In cases of clarocellulare carcinoma, serous carcinoma, low histological grading (G2, G3) [5, 6], the treatment should be extended to therapeutic treatment of swabs of the peritoneum and the removal of lymph nodes around the ilio-obturator area – total radical laparoscopic hysterectomy (TLRH).

Case reports

The first case was a patient, aged 66, admitted to the clinic because of acyclic bleeding lasting for 9 months. Last normal menstrual period was at the age of 51. She gave birth twice vaginally. A patient with obesity, diabetes and hypertension. Histological examination of the uterine cavity exams-complex endometrial hyperplasia with atypia. The sonographic examination – uterus of normal size and small myomas, heterogeneous endometrial echo with thickness of 9 mm. She was qualified for vaginal hysterectomy with ovaries and fallopian tubes. Surgery without complications. The final histopathological examination of uterine-carcinoma endometriale G2. The patient was readmitted to the hospital to expand surgical treatment with laparoscopic ilio-obturator lymphadenectomy and remove the parametrium and part of the vagina vault. In preparation for surgery procedure the CT scan was made. It showed non-pathological changes or lymphadenopathy. The course of treatment was without complications. Eighteen ilio-obturator nodes on both sides were removed, a 2 cm margin of parametrium was removed going in the direction of the parametrium perivesical space. The vaginal stump was shortened by 2 cm. In the peritoneal cavity the drain was left. The ilio-obturator areas were drained separately. 420 ml of blood loss was found. The postoperative course was feverless. The patient was discharged home in good

condition on the 3rd day of hospitalization with the recommendation of oncological consultation.

In the second case, the 69-year-old patient was hospitalized because of abdominal pain persisting from approximately 2 years without pathological bleeding. The patient was not eligible, the last normal menstrual period at the age of 49. During transvaginal sonography an abnormal image was found. The endometrial echo was heterogeneous with a thickness of 14 mm. Endometrial atypical complex hyperplasia was a result of histological examination performed in another clinic. The patient was originally qualified for a vaginal hysterectomy with ovaries and fallopian tubes. The postoperative course had no complications. Clarocellulare carcinoma was the final histological result. The patient after the CT scans (CT with no abnormality) was qualified for laparoscopic ilio-obturator area lymphadenectomy and resection of the parametrium and part of the vagina vault. Nineteen ilio-obturator nodes on both sides were removed. In the three obturator nodes on the left side and in one on the right side a subcapsular metastasis of clarocellular carcinoma was found. A 2-3 cm margin of parametrium and vaginal stump was cut. The blood loss was 380 ml. The postoperative course was without complications. The patient was discharged home on the third day of hospitalization with the recommendation of oncological consultation.

Both surgical procedures were performed by Dr Paweł Pawłowicz.

Discussion

The distinction between complex atypical endometrial hyperplasia and high-differential endometrial cancer may be difficult and is an important diagnostic problem. Both underestimation and overestimation of the changes are very common and the level of repeatability of results is questionable, reaching only 40% [7]. Numerous reports also indicate a low correlation between intraoperative and final pathological results. Research conducted by Indermaur et al. have confirmed that intraoperative examination shows a small utility in the definitive diagnosis of pathology in women with a preoperative diagnosis of complex endometrial hyperplasia with atypia (60.8% mismatch). In 8 of 14 (57%) patients with endometrial hyperplasia diagnosed intraoperatively, the definitive histological examination showed endometrial cancer [9]. According to other authors (data from the Mayo Clinic) with an appropriately experienced and trained pathologist, intraoperative results of frozen section analysis are reliable [10].

Evaluation of lymph nodes is a prognostically important factor in cancer of the uterus. Therefore, the removal of nodes is a necessary part of the staging of the disease and sometimes may have therapeutic rele-

vance and improve the prognosis after surgery. Currently it is believed that laparoscopic lymphadenectomy is a method of choice, allowing for better visualization, reduced complications and is less invasive compared to laparotomy [17, 18]. According to publications on coexistent endometrial cancer in patients with atypical endometrial hyperplasia, the majority of cancers are well-differentiated, early-staged malignancies and are most likely considered to be at low risk for lymph node metastasis [11-13]. However, not all patients have low-risk disease. Studies confirm the presence of both high- and low-risk cancers in patient with atypical endometrial hyperplasia [3, 13, 14].

Because of the coexistence of high-risk endometrial cancer in women with a typical endometrial hyperplasia complex and low usefulness of intraoperative tests in detecting tumour invasion, Whyt and colleagues suggested the usefulness of routine ilio-obturator lymphadenectomy in patients with a preoperative diagnosis of complex hyperplasia with atypia. They found that the information obtained by lymphadenectomy carried out simultaneously with hysterectomy had an impact on the choice of treatment approaches in 7 of 25 (28%) patients with cancer. The duration of the operation was not significantly prolonged (16 min), the blood loss was not increased and the time of hospitalization was not prolonged [8].

Bearing in mind that curettage may not sample the entire endometrium and the areas of greatest histological severity may not be evaluated by a histologist, colour Doppler sonography and estimation of neovascularization of endometrium can be useful to confirm the real endometrial pathology [15, 16].

There is certainly a need to improve the repeatability of the results of histopathological examination, as well as improving the pre- and intra-operative detection of the coexistence of complex atypical endometrial hyperplasia and endometrial cancer.

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