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A case of a large endometrial cyst imitating an ovarian neoplasm

Endometriosis is a disease characterized by presence of active endometrial tissues located outside the uterine cavity. It is a common disease of reproductive age women – its prevalence has been estimated for 5% to 15% (3, 4). Determination of exact frequency of its occurrence is extremely difficult as the final diagnosis can be made only on laparotomy or laparoscopy, and must be histopathologically proven. In infertile women endometriosis is found in about 40% of the population (6). The course of the disease is usually chronic and progressing, so endometriosis may be considered a “clinically aggressive” pathology. In the smaller pelvis there are found various forms of external endometriosis – peritoneal, ovarian and Douglas cul-de-sac disease. However, the ovarian disease is the most prevalent (2,8). Fully developed endometriosis may be a huge diagnostic problem as it mimics symptoms of other pathologies such as neoplasms with elevation of serum neoplastic markers (1, 8).

CASE REPORT

A female patient, aged 27, was hospitalized in the Department of Procreation and Andrology of the Medical University of Lublin with suspicion of left ovarian tumor. She was asymptomatic and suggestion of left ovarian pathology was raised during routine gynaecological examination. Her medical history was uneventful. On gynaecological examination in the region of left appendages there was found a palpable, barely mobile tumor of about 110 mm in diameter. On transvaginal ultrasound examination the left ovary was enlarged (about 320 ml in volume) and contained a multilocular, hypoechoic cyst with smooth margins, which measured 119x98x76 mm (Fig. 1). Doppler ultrasound allowed visualization of a single blood vessel with normal blood flow indexes in the upper pole of the tumor.

Due to the result of the ultrasound examination raising suspicion of a neoplastic lesion as well as elevated CA125 level in blood serum (166.35 U/ml, that is fivefold the normal level), the diagnostic process was continued and computed tomography (CT) examination was performed. In this examination in the small pelvis there was an evident well-defined, round, multilocular lesion with a distinct capsule (Figs. 2–4). The center of the lesion was hypodense (28–37 HU) and non-enhancing, while there was demonstrated enhancement (from 44 to 80 HU) of an 8 mm thick part of its capsule. Other abdominal viscera were free from pathology. The CT image characteristics evoked benign etiology, however, expansile cystic ovarian neoplasm with a solid component could not be excluded.



Fig. 1. On transvaginal ultrasound scan there is visible enlargement of the left ovary which contains a multilocular, hypochoic cyst with thin margins



Fig. 2. Computed tomography (CT) examination revealed a well-defined, round, multilocular pathologic lesion with distinct capsule. Hypodense content of the lesion was non-enhancing, while there was demonstrated enhancement of 8 mm thick part of its capsule



Fig. 3. Coronal CT reconstruction shows the lesion in the smaller pelvis

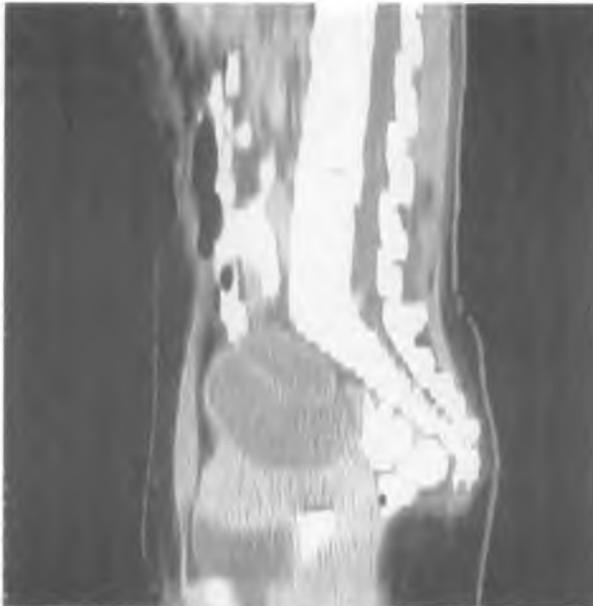


Fig. 4. Saggital CT reconstruction – there is visible the bladder, the uterus and multilocular lesion located over the uterus

Due to inconclusive results of the imaging diagnostics examinations a decision of laparoscopy with a possibility of laparotomy in case of detection of a malignant lesion was taken. During the intervention in the left ovary there was found a multilocular endometrial cyst, measuring 110 mm in diameter, in adhesion with ovarian pit and fallopian tube. The cyst was mobilized by removing the adhesions, and, after incision, its content (that is hemolized blood) was evacuated and cyst capsule was enucleated. The operation and post-operative period were uneventful. The final histopathologic examination result was *Cystis picea*. The patient was qualified for therapy with Gn-Rh analogues.

DISCUSSION

Endometrial cysts differ from other cystic ovarian tumors in morphologic features and content. Rarely do their dimensions overpass 10 cm (2). In literature there are found only several case reports of huge endometrial cysts (2, 5, 6). Larger dimensions of cysts imply higher risk of neoplastic proliferation, so when they exceed 15 cm, neoplasm must be suspected (2). Therefore, frequently tentative diagnosis based on clinical and radiological data is that of an ovarian malignancy (5) as it was in the presented case. Differential diagnosis of endometrial cyst and other masses of appendages is difficult solely on the basis of ultrasound examination or computed tomography: the interior of the lesion may be fluid, solid or mixed, and due to large dimensions it is intricate to exclude possibility of malignancy (2). Specificity of abdominal ultrasound examination is not high in cases of endometrial cysts (1). Transvaginal ultrasonography has sensitivity of 82-84%, and specificity reaching 90% to 97.7%. On the other hand, it has not been proved that the use of color Doppler in transvaginal sonography improves the diagnostic accuracy (1). According to Togashi et al. (8) magnetic resonance imaging (MRI), characterized by sensitivity, specificity, and accuracy of 90%, 98% and 96%, respectively, seems to be a very efficient examination in cases of differential diagnosis of ovarian endometrial cyst and other pathologies, with or without bleeding to the interior of the mass. It is also believed that although MRI will not substitute laparoscopic evaluation of the pelvis, it is an acceptable diagnostic test on which clinical decisions can be based (8).

CONCLUSIONS

Differential diagnosis of huge, uncharacteristic cystic lesions of appendages should also include the possibility of an endometrial cyst.

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SUMMARY

A case of giant endometrioma imitating an ovarian neoplasm is reported and difficulties in radiological differential diagnosis of such lesions are discussed.

Przypadek dużej torbieli endometrialnej imitującej proces rozrostowy jajnika

W pracy przedstawiono opis przypadku olbrzymiej torbieli endometrialnej imitującej proces rozrostowy jajnika i przedyskutowano trudności w radiologicznej diagnostyce różnicowej takich zmian.