

Synchronous cervical and ovarian cancer detected with ^{18}F -FDG PET/CT examination

Kamila Kaźmierczak¹, Witold Cholewiński², Anna Filipczuk², Błażej Nowakowski¹

¹Surgical, Oncological and Endoscopic Gynaecology Department, Greater Poland Cancer Centre, Poznan, Poland

²Nuclear Medicine Unit, Greater Poland Cancer Centre, Poznan, Poland

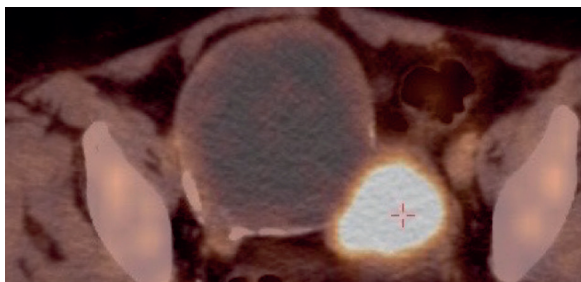


Figure 1. A litho-cystic tumor (78 x 76 x 75 mm) in the left pelvis. The upper solid part of the tumor (44 x 34 x 3 mm) shows a high accumulation of FDG with a maximum standardized uptake value (SUVmax) of 11.0 and the features of an aggressive proliferative process

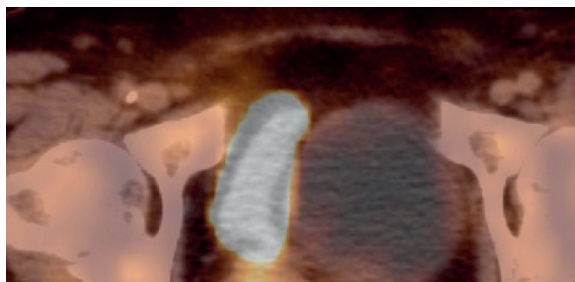


Figure 2. A hypodense area (19 mm in diameter) in the cervix with a slightly increased accumulation of FDG (SUVmax up to 2.9) and metabolic features suggesting a primary malignant lesion (transverse projection)

A 68-year-old patient was referred to the Gynecologic Oncology Outpatient Clinic with a diagnosis of bilateral ovarian tumors. The medical interview revealed that the patient had not had a gynecological examination in a long time. The ovarian tumors were evaluated with the risk of malignancy index (RMI) based on the serum CA-125 level, menopausal status, and ultrasound features. The high RMI score of 240 suggested malignant hyperplasia. Next, positron emission tomography/computed tomography with ^{18}F -fluorodeoxyglucose as a radiopharmaceutical (^{18}F -FDG PET/CT) was performed; the scan revealed a primary malignant lesion in the left ovarian tumor and cervix (fig. 1–2). Subsequent cervical diagnostics and a histopathological examination confirmed the coexistence of cervical cancer. The patient was qualified for surgery using a total hysterectomy with bilateral salpingoophorectomy and

surgical staging. The evaluation of resected material confirmed left ovarian cancer (FIGO 2014 stage IA G3) and cervical cancer (FIGO 2018 stage IB1 G2). Radiotherapy was used as adjuvant treatment. Currently, the patient is under observation. The PET/CT examination is useful in assessing ovarian cancer and has shown efficacy in the diagnosis of lymph node lesions (96% accuracy) and distant metastases [1]. In the case of cervical cancer, a PET/CT scan can aid in diagnosing lesions as small as 7 mm [2].

References

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