PREDICTIVE VALUE OF 18F-FDG ACCUMULATION IN VISCERAL FAT ACTIVITY TO DETECT EPITHELIAL OVARIAN CANCER METASTASES

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Introduction/Background Epithelial ovarian cancer (EOC) is the most lethal gynecological malignancy, with relapse occurring in about 70% of advanced cases with poor prognosis. The aim of the study was to evaluate functional visceral fat activity (VAT) evaluated by 18F-fluorodeoxyglucose (18F-FDG) positron emission tomography/computed tomography (PET/CT) as a predictor of metastases in EOC.

Methodology We enrolled study protocols and PET/CT data of 398 CRC patients; 345 patients were subsequently excluded for various reasons. The remaining 53 patients with histologically confirmed adenocarcinoma, carcinoma and cystadenocarcinoma were then prospectively assessed and underwent 18F-FDG PET/CT after a surgical treatment and chemotherapy. Age, histology, stage, and tumor grade were recorded. Functional VAT activity was measured by maximum standardized uptake value (SUVmax) using 18F-FDG PET/CT and tested as a predictor of later metastases in eight abdominal locations (RE – Epiaplastic Region, RLL – Left Hypochondriac Region, RRL – Right Lumbar Region, RU – Umbilical Region, RLG – Left Lumbar Region, RRI – Right Inguinal Region, RP – Hypogastric (Pubic) Region, RLI – Left Inguinal Region) and pelvic cavity (P) in the adjusted regression models. We also identified the best areas under the curve (AUC) for SUVmax with the corresponding sensitivity (Se) and specificity (Sp).

Results In both adjusted for regression models and ROC analysis, 18F-FDG accumulation in RE (cut-off SUVmax 1.18; Se 64%; Sp 64%; AUC 0.669; p = 0.035) could predict later metastases in EOC patients, as opposed to age, sex, primary tumor location, tumor grade, and histology.

Conclusion Functional VAT SUVmax is significantly associated with later metastases in EOC patients and can be used as their predictor.

CYSTIC MALIGNANT TERATOMA IN A 33-YEAR-OLD WOMAN: A CASE REPORT

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Introduction/Background Cystic teratoma is the most common ovarian neoplasm but the malignant form is very rare and it accounts for 1%. It consists of well-differentiated derivatives of germ cell layers (i.e., ectoderm, mesoderm, and endoderm) developing as hair, muscle, teeth, or bone.

Methodology 33-year-old woman was admitted to our hospital because she noticed that her stomach had grown. She had occasional abdominal pain and constipation for several years. We did a detailed gynecological examination. Ultrasound examination with an abdominal probe showed that it was a tumor 15 cm in diameter, which consisted partly of hyper, partly hypoechoic content. The other blood parameters were within normal limits. Tumor marker CA 125 was within normal limits as CEA, but the value of alpha-fetoproteins was partly hypoechoic content. The other blood parameters were within normal limits. Tumor marker CA 125 was within normal limits as CEA, but the value of alpha-fetoproteins was within normal limits. Tumor marker CA 125 was within normal limits as CEA, but the value of alpha-fetoproteins was within normal limits. Tumor marker CA 125 was within normal limits as CEA, but the value of alpha-fetoproteins was within normal limits. Tumor marker CA 125 was within normal limits as CEA, but the value of alpha-fetoproteins was within normal limits.

Results We decided to do a laparotomy and removed the tumor completely. We checked other internal genitals organs...