

A case of non-Hodgkin's lymphoma of the ovary: Usefulness of ^{18}F -FDG PET for staging and assessment of the therapeutic response

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Primary ovarian lymphoma as the initial manifestation is rare. A 27-year-old woman presented to our hospital with the symptoms of lower abdominal fullness and pollakisuria. CT scan and MRI revealed bilateral ovarian tumors, which showed heterogeneous masses. ^{18}F -FDG PET revealed strong uptake by the abdominal masses, and the maximum standardized uptake value (SUV_{max}) was 12.5. Abnormal uptake was not shown by other regions. An exploratory laparotomy was performed. Histological findings revealed diffuse large B-cell lymphoma. The clinical stage was IV according to the Ann Arbor system. International prognostic index (IPI) was 3 (high-intermediate risk). Chemotherapy was administered consisting of three courses of an R-CHOP regimen, and ^{18}F -FDG PET and CT scan revealed no signs of involvement 3 months after initiation of the chemotherapy. ^{18}F -FDG PET was a useful method for staging and assessment of the therapeutic response in primary ovarian lymphoma.

Key words: lymphoma, ovary, PET