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Case Report

A rare presentation of a patient with primary female genital lymphoma

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ABSTRACT

Objective: Primary lymphoma originating from the female genital tract (PLFGT) is extremely rare and so we wanted to present clinical and PET / CT findings of a case with PLFGT.

Case report: PET / CT images of a 57-year-old woman with abdominal pain revealed a hypermetabolic mass in the pelvic region, involving the uterus and cervix, extending to the bilateral adnexal region. Histopathological evaluation of the mass was determined as follicular lymphoma.

Conclusion: Although PLFGT is extremely rare, the possibility of lymphoma should also be kept in mind in patients with gynecological mass.

Keywords: Extranodal lymphoma, Primary lymphoma of the female genital tract, PET/CT.

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Introduction

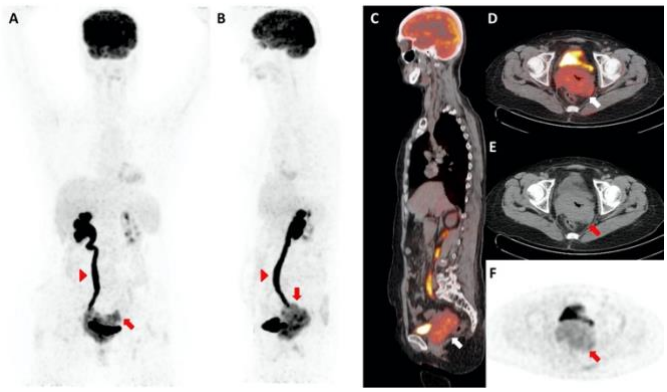
Non-Hodgkin's lymphoma (NHL) is classified as nodal and extranodal lymphoma according to the area of involvement. Generally, lymph node, spleen, thymus and Waldeyer's ring involvement are defined as nodal, and the other organ involvements are defined as extranodal lymphoma [1]. Extranodal lymphomas can develop in almost every organ, including those that do not contain native lymphoid tissue [2]. It is quite difficult to distinguish primary extranodal lymphoma from secondary involvement, especially in the presence of both nodal and extranodal disease. Some authors state that if an extranodal area is clinically dominant, the case can be classified as primary extranodal lymphoma [3]. Primary lymphoma originating from the female genital tract (PLFGT) is extremely rare (incidence <0.5%) [4]. F-18 fluorodeoxyglucose (FDG) positron emission tomography (PET)/computed tomography (CT) that is frequently used for malignancies, is an imaging method provides valuable functional and anatomical information. Here, we present FDG PET / CT images of a patient with PLFGT.

Case presentation

A 57-year-old woman underwent abdominal ultrasonography (USG) due to abdominal pain. USG revealed a 10 cm long mass on the back of the bladder in the pelvic region. Gynecological malignancy was considered principally and the patient underwent F-18 FDG PET/CT. PET/CT detected a hypermetabolic (SUVmax: 12.9) mass (Figure 1- arrows) in the pelvic region, , approximately 10x7.1 cm in size, involving the uterus and cervix, extending to the bilateral adnexal regionç

Furthermore, FDG accumulation was observed in the right kidney pelvicalyceal structures and right ureter (Figure 1- arrowheads) because of the urinary stasis likely due to the ureter invasion or compression of the mass. The patient underwent total hysterectomy and bilateral salpingo-oophorectomy. Histopathological evaluation revealed follicular lymphoma (grade 2) in the uterus, cervix and bilateral ovaries.

Figure 1. F-18 FDG PET maximum intensity projection (MIP) (A-B), sagittal fused PET/CT (C), axial fused PET/CT (D), axial CT (E) and axial PET (F) images of a 57-year-old patient with primary female genital lymphoma.



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Discussion

NHL can be originated from nodal or extranodal tissues [5]. PLFGT clinical symptoms are nonspecific and Stroh et al. reported that the most common symptoms at presentation are vaginal bleeding and abdominal pain [6]. The only symptom in our patient was abdominal pain. Due to the nonspecific findings, patients are generally diagnosed as a result of pathological evaluation of the surgical staging performed with a preliminary diagnosis of gynecological malignancy [3]. Cervix and ovaries are the most frequently tissues that PLFGT arises [7]. In our case, the involvement of the ovary, cervix and uterus was existing. The most common lymphoma type of the female genital system is diffuse large B-cell lymphoma (DLBCL) [8]. Our case was follicular lymphoma, a more rare type of PLFGT.

In conclusion, although PLFGT is extremely rare, the possibility of lymphoma should also be kept in mind in patients with gynecological mass.

Disclosure

Authors have no potential conflicts of interest to disclose.

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