

Clinical Image

# Exophytic Lymphoma of the Uterus Identified by 18-FDG PET Scan

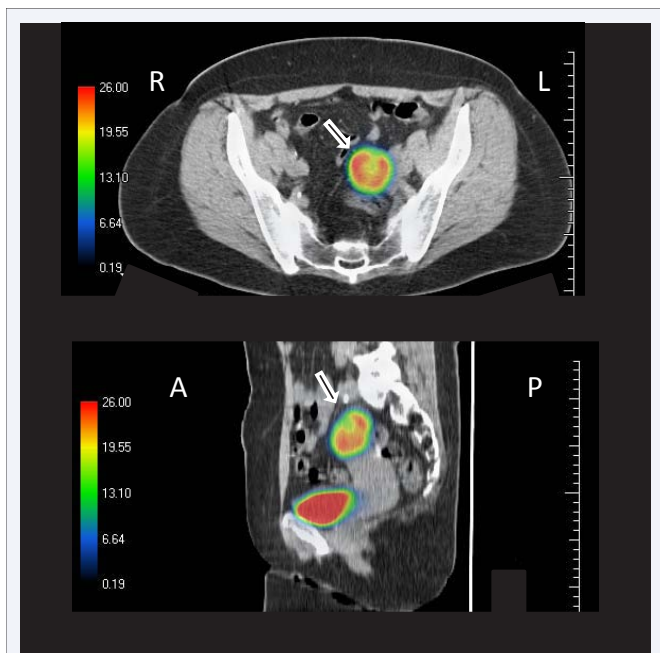
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CLINICAL IMAGE

A 56 year old woman with stage IV follicular lymphoma presenting with bilateral axillary and inguinal lymphadenopathy seven years back was treated by chemotherapy at an outside institution and had been in remission since past five years. She then presented with a right groin mass, which on excisional biopsy was reportedly positive for lymphoma. PET/CT scan performed in a Siemens Biograph 6 after 70 minutes of incubation following the intravenous administration of 13.2 mCi 18-F fluorodeoxyglucose (FDG) with a blood glucose of 100 mg/dl showed an intensely hypermetabolic 4.9 x 4.3 x 4.2 cm exophytic mass with a maximum SUV of 31.4 arising from the uterine fundus. No other hypermetabolic abnormalities were identified in the PET/CT scan (Figure 1).



**Figure 1** PET/CT scan obtained with 18-F FDG demonstrates a hypermetabolic pelvic mass.

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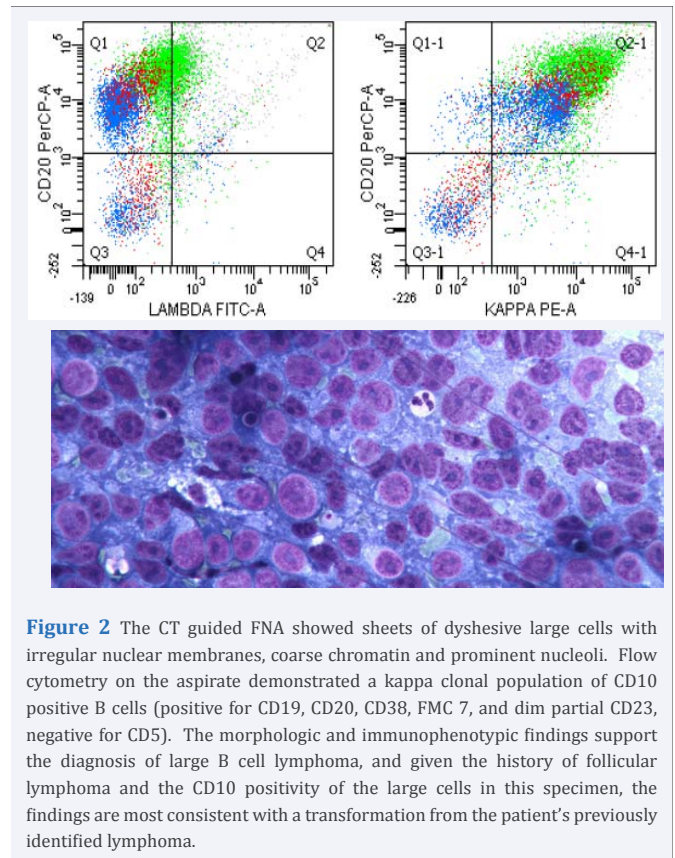
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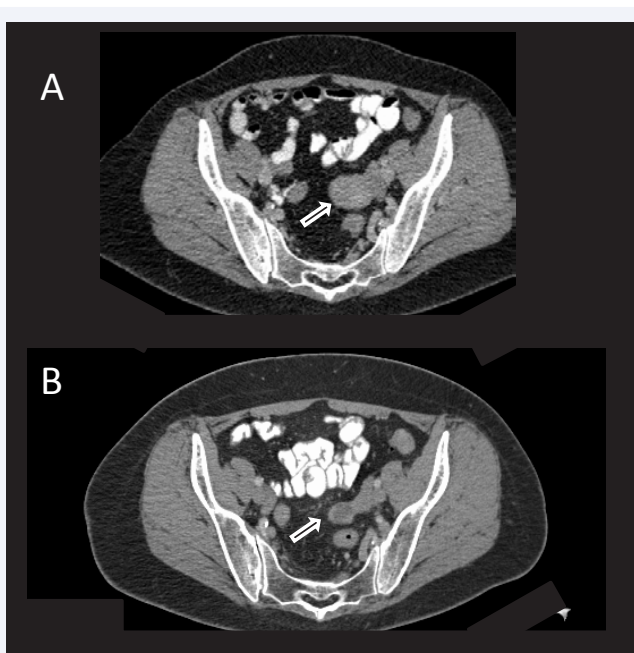
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**Figure 2** The CT guided FNA showed sheets of dysplastic large cells with irregular nuclear membranes, coarse chromatin and prominent nucleoli. Flow cytometry on the aspirate demonstrated a kappa clonal population of CD10 positive B cells (positive for CD19, CD20, CD38, FMC 7, and dim partial CD23, negative for CD5). The morphologic and immunophenotypic findings support the diagnosis of large B cell lymphoma, and given the history of follicular lymphoma and the CD10 positivity of the large cells in this specimen, the findings are most consistent with a transformation from the patient's previously identified lymphoma.

The role of 18-F FDG PET/CT scans in the diagnosis and staging of lymphomas is well established in the literature [1]. Uterine lymphomas are rare tumors [2-8]. The cases described in the literature have typically demonstrated, diffuse or focal involvement of the uterus, intravascular involvement or presentation as an endometrial polyp. Exophytic appearance of uterine lymphomas appears to be unusual. Hypermetabolism in the uterus can be identified in various conditions such as menstruation, post partum status or lymphomas [9]. This case illustrates the importance of including exophytic lymphomas of the uterus in the differential of pelvic hypermetabolic masses.



**Figure 3** Follow up CT scan (B) obtained 3 months later following external beam radiotherapy 4500 cGy in 20 fractions shows the uterine mass to have responded and be significantly smaller at 1.5 x 1.1 x 1.6 cm as compared to the pre-therapy scan (A).

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### Cite this article

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