بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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شبكة المعلومات الجامعية

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جامعة عين شمس

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Utility of PET/CT for therapy response assessment in non-Hodgkin's lymphoma

Thesis

Submitted For Partial Fulfillment of Master Degree in Radio-Diagnosis

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ABSTRACT

Aim of the study: to evaluate the role of PET/CT in initial diagnosis and staging of lymphoma, and to determine the predictive value of 18F-FDG PET by monitoring the early response and final response after completion of chemotherapy in patients with non-Hodgkin's lymphoma.

Patient and Methods: our prospective study included 25 patients with pathologically confirmed non-Hodgkin Lymphoma diffuse large B cell lymphoma selected from Department of Radiology at Ain Shams University Hospital from January 2019 to March 2020. The patients included in this study performed the followings: Initial PET/CT for staging, interim PET/CT and end of the treatment PET/CT. We performed low dose non enhanced CT scan first, then a whole body PET study followed by diagnostic enhanced whole body CT scan. The whole study took approximately 20-30 minutes.

Results: PET/CT has greater sensitivity 100% and specificity 68.8% than CT alone for detecting sites of nodal and extra-nodal involvement and for assessment of therapeutic response in non-Hodgkin lymphoma.

Conclusion: PET / CT is an accurate method for evaluating tumor viability in the post-therapy setting of Non-Hodgkin lymphomas. PET / CT has a significant advantage for the diagnosis of diffusely infiltrating organs without mass lesions or contrast enhancement compared to contrast enhanced CT.

Keywords: Flourodeoxyglucose 18F, Positron emission tomography, Computed tomography, nodal, extra-nodal, lymphoma, Deauville criteria-IHP (international harmonizing project), progression-free survival (PFS).

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