

Pitfalls of positron emission tomography for assessing relapse in Hodgkin's disease: a case report

FDG-PET imaging is more frequently being used to stage malignant Lymphoma and monitor response to therapy. However, FDG-PET is not a tumor specific substance and increased accumulation may be seen in a variety of benign entities, our case exemplifies this problem and underline the importance of a biopsy.

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FDG-PET imaging has a high sensitivity and specificity,¹⁻⁴ even if false positive cases do occur and are problematic⁵, we present a case which exemplifies this dilemma and emphasizes the importance of obtaining a biopsy. A 52 year old man presented with fever persisting for 1 month. He had been diagnosed with stage IIIB nodular sclerosing Hodgkin's Lymphoma one year earlier, subsequently, the patient was treated with six cycles of ABVD chemotherapy with complete remission. Initial investigations included an abdominal conventional Computed Tomography which showed the presence of several para-aortic lymphadenopathy (Figure 1), a whole body positron emission tomography using ¹⁸F-fluorodeoxyglucose (FDG-PET) showed a positive uptake suggesting a recurrent disease (Figure 2). On the basis of these findings, a biopsy was performed to confirm active Hodgkin's Lymphoma before high-dose chemotherapy with PBSC. Surprisingly, histological examination revealed the presence of numerous granulomas with caseation and multinucleated giant cells of the Langhans type (Figure 2). A positive culture and a strongly positive Mantoux Test supported the diagnosis of abdominal lymph-node tuberculosis. He was treated with isoniazid, rifampicin and pyrazinamide which led to the resolution of the fever by the end of the first week of therapy. A substantial minority of cases of tuberculosis occur at sites other than the lung and more commonly these occur in patients with post primary pulmonary tuberculosis; however, our patient has never presented a previous history of tuberculosis so, the diagnosis of tuberculosis was really unexpected.

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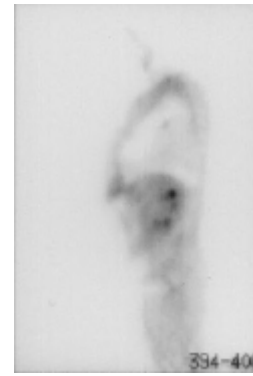


Figure 1. FDG-PET image: lateral (right) projection.

Figure 2. Multinucleated giant cell.

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