

Massive thyroid involvement by marginal zone B cell NHL as demonstrated by ^{18}F -FDG-PET/CT

To the Editor: The HJNM has published a paper and a letter on mucosa associated lymphoid tissue lymphoma where there was no reference to thyroid lymphoma [1, 2]. We do mention here a primary thyroid lymphoma which is a rare malignant tumor, occurring in 1%-5% of thyroid malignancies and in less than 2% of extranodal lymphomas. This tumor is frequently associated with Hashimoto's thyroiditis and is usually a non-Hodgkin's lymphoma (NHL) [3, 4]. The most frequent histopathologic types of this lymphoma are extranodal marginal zone B-cell, diffuse large B-cell and marginal zone B cell of mucosa-associated lymphoid tissue (MALT) [3]. This lymphoma is most common in the sixth and seventh decade of life and in women, with a male/female ratio of 1:4 [3-5]. The main symptoms are a rapidly enlarging goiter which can cause dysphagia, stridor and hoarseness [3-4]. Fine needle aspiration biopsy (FNAB) usually suggests NHL, while open biopsy is necessary to confirm the diagnosis [6]. The treatment includes chemo and radiation treatment and the prognosis depends on histological results and the stage of the disease. A correct staging is pivotal in order to evaluate treatment response and the timing of the re-evaluation scans [10, 11]. MALT lymphomas tend to have a more indolent course and have better prognosis compared with the large B-cell types which are associated with an aggressive course [6]. The accuracy of ^{18}F -FDG-PET/CT in diagnosing lymphomas is well established but up to now, few cases have been reported describing the role of PET in thyroid lymphomas [7-9].

Such a case was a 67 years old woman with a rapidly growing goiter and laterocervical lymph nodes which were examined by echography and CT. FNAB of a supraclavicular lymph node suggested the presence of a marginal zone B-cell type NHL. The histologic examination of the latero-cervical lymph node showed an altered architecture with nodular aspect and accumulation of lymphoid elements (B phenotype CD20+, CD79a+, BCL6-) with round regular nucleus, without nucleolus. Conclusion: NHL-B marginal zone, nodal (OMS 2001). The examination of right and left thyroid lobe revealed the presence of high colloid cellularity be constituted by lymphoid polymorphic cells mixed with small lymphoid cells and large immunoblasts.

In order to stage the disease, the patient underwent ^{18}F -FDG-PET/CT which showed a massive thyroid involvement with associated high uptake at cervical and mediastinal lymph nodes and on a pulmonary nodule at the upper left lobe.

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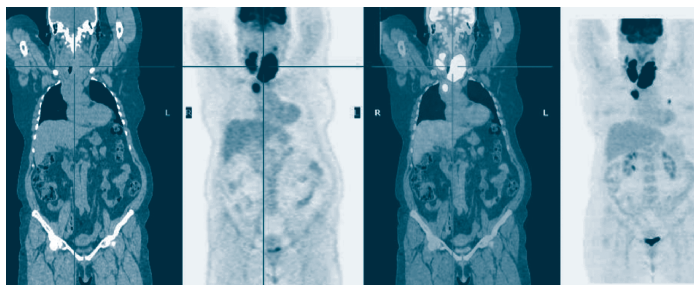


Figure 1. ^{18}F -FDG-PET/CT supporting staging image of thyroid NHL.

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Published on line: 3 March 2009