Endocrine (2012) 42:456–457
DOI 10.1007/s12020-012-9653-8

LETTER TO THE EDITOR

Synchronous thyroid and gastric diffuse large B-cell lymphoma

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Published online: 17 March 2012

Sir,

Primary thyroid lymphoma is a rare disease, representing approximately <2 % of extranodal lymphomas [1]. Furthermore, coincidence of extrathyroidal lymphoma with thyroid lymphoma is very rare. We describe a patient who presented with a hard thyroid mass suggestive of a primary thyroid cancer, who proved to have gastric lymphoma 6 years ago.

Case

A 69 years-old woman patient was admitted to the hospital with dyspnea, hoarse voice, and swelling of throat for a month. In her history, she had been diagnosed as having had gastric lymphoma 6 years ago, while she was being investigated for upper gastrointestinal bleeding. Six cures of chemotherapy has been applied. She was not on follow up. In physical examination, she looked cachectic and dyspneic. Thyroid was enlarged diffusely and multiple nodules were palpated. Trachea was shifted and pressed by the thyroid. Laboratory tests were as follows: Hgb: 10.1 g/dL, TSH: 0.8 μIU/mL (0.6–4.8), fT4:1.1 ng/dL (0.74–1.52), fT3: 1.3 pg/mL (2.3–4.2), anti-TPO: 133 U/mL (0–57), anti-T: 130 U/mL (0–64), TG: 155 (1.6–59.9) ng/mL. Thyroid ultrasonography revealed chronic thyroiditis and multinodular goiter. FNA biopsy was performed to the nodules and diffuse large B-cell lymphoma (CD 20 was positive, CD3 and CD30 were negative) was detected. In addition, diffuse large B-cell lymphoma was revealed at the endoscopic gastric biopsy specimen, too (CD 20 and bcl-6 were positive and Ki-67 proliferation index was 99 %). At radiolological evaluation for the staging of disease, subcarinal and paratracheal lymphadenopathies and multiple nodules in each of the lungs were detected. Her performance status was poor so that bronchoscopy could not be applied. After several days, her performance status worsened and she died.

Discussion

Non-Hodgkin's lymphoma (NHL) classically makes progress in the lymph nodes but NHL may arise from extranodal sites. The gastrointestinal tract is most common site for extranodal NHL. The most commonly involved site is the stomach (60–75 % of cases), followed by the small bowel, ileum, cecum, colon and rectum. Most common of histological type in gastric lymphoma is diffuse large B-cell lymphoma (59 %) and followed by mucosa-associated lymphoid tissue (MALT) lymphoma of the marginal zone (38 %) [2]. Thyroid lymphoma classically affects elderly women such as in this case [3], but this two clinical antithesis coincidence is very rare. Generally thyroid lymphoma has two histological subtypes; diffuse large B-cell lymphoma and the MALT lymphoma [1]. Multiple risk factors exist for developing extranodal lymphoma such as immunosuppressive drugs, HIV infection, Hepatitis B, C and Epstein Barr virus. Our patient had not any risk factors for extranodal lymphoma. However, she had a chronic autoimmune thyroiditis which was a predisposant condition about thyroid lymphoma.

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As stated above the gastrointestinal tract is the commonest site for extranodal disease with <3 % affecting the thyroid gland [3]. There is an association of thyroid and gastric lymphoma of MALT type. Because they share the same endodermal origin; it is therefore interesting that large diffuse B-cell lymphoma was the cause [3]. So that if a patient has a history of gastric lymphoma thyroid mass and nodules must detected carefully.

In this case report, we aimed to remind that thyroid nodules which were developed on the base of chronic thyroiditis should be immediately evaluated for lymphoma, especially in cases which gastric or another organ lymphoma had been detected synchronously. This report highlights the importance of relationship between thyroid and gastric lymphoma. After all, high-grade diffuse B-cell lymphomas are curable if detected early.

Conflict of interest The authors declare that they have no conflict of interest.

References

1. S.M. Ansell, C.S. Grant, T.M. Habermann, Primary thyroid lymphoma. Semin. Oncol. **26**, 316–323 (1999)
2. A. Psyrri, S. Papageorgiou, T. Economopoulos, Primary extranodal lymphomas of stomach: clinical presentation, diagnostic pitfalls and management. Ann. Oncol. **19**, 1992–1999 (2008)
3. C. Edmonds, Thyroid Lymphoma, in *Clinical Endocrine Oncology*, ed. by R. Sheaves, P. Jenkins, J. Wass (Blackwell Science, London, 1997), pp. 131–133