THYROID MALIGNANT LYMPHOMA

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Abstract: *Extranodal malignant lymphomas are rare and more difficult to diagnose than nodal lymphomas. Thyroid primary lymphoma is extremely rare, but its evolution after chemotherapy + radiotherapy or surgery is often favourable. We present the case of a female patient diagnosed with non-Hodgkin's malignant lymphoma of marginal zone, extranodal, mucosal associated lymphatic tissue type, based on histopathological and immunohistochemical exam of resected thyroid. The evolution under chemotherapy + rituximab was favourable, as afterwards.*

Cuvinte cheie: *CHOP, MALT, limfom tiroidian primar, rituximab*

Rezumat: *Limfoamele maligne extranodale sunt mai rare și mai greu de diagnosticat față de cele nodale. Limfomul primar tiroidian este extrem de rar, dar evoluția după chimioterapie + radioterapie sau tratament chirurgical este frecvent favorabilă. Prezentăm cazul unei paciente diagnosticate cu limfom malign non-Hodgkinian de zonă marginală, extranodal, tip țesut limfatic asociat mucoaselor, pe baza examenului histopatologic și imunohistochimic al tiroidei rezecate. Evoluția sub chimioterapie + rituximab a fost favorabilă, ca și ulterior.*

INTRODUCTION

In the neck region, inflammatory, congenital or neoplasic lesions can appear. Lymphomas represent 20% of neoplasias with this location in a recent study made on a group of 630 patients.(1) Between thyroid neoplasias less than 5% there are lymphomas. Although this location of lymphomas is rare, their diagnosis is necessary because they have a specific treatment among thyroid malignancies and a particular evolution even among lymphomas.

CASE REPORT

A female patient aged 46 years old presented to the hematology service with the histopathological result of the thyroid which was resected for suspected diffuse goiter: extranodal marginal zone non-Hodgkin's malignant lymphoma of mucosa-associated lymphatic tissue (MALT) type. Immunohistochemistry established that lymphocytes were CD20 +, CD5-, CD10-, BCL2 weak and focal +. The patient was asymptomatic and without detectable pathological peripheral lymph nodes. Thoracic CT scan with abdominal extension did not reveal any pathological lymph node. Myelogram and histo-pathological examination of the bone marrow revealed no atypical lymphocytic infiltrate. Upper digestive endoscopy revealed a hiatal hernia, a stomach resection (for perforated duodenal ulcer) with end-to-end anastomosis and congestion of the Ist segment of the duodenum. The irrigoscopy examination showed megadolicosigmoid, no images suggestive of stenosis or stops, with safety lizereum maintained in double contrast, and ptosis of transverse colon.

The patient was treated with 8 courses of polychemotherapy type CHOP + rituximab. In addition, she received treatment with metoclopramide, performed for esophageal reflux prophylaxis, and with trimethoprim + sulfamethoxazole - for the prophylaxis of pneumocystis carinii infection.

During chemotherapy, she had no severe adverse effects. After the 6th polychemotherapy course, she presented an episode of severe neutropenia, which required administration of filgrastimum. She presented a few acute upper respiratory tract infections, rapidly declining under treatment.

CT scan performed at the end of treatment revealed no pathological adenopathies. She maintained the treatment with rituximab (one dose at 2 months). 46 months later, she is still in complete remission.

DISCUSSIONS

The tumour in the cervical region may be an emergency due to compression of the airways. In addition to an enlarged thyroid volume plunged retrosternally, mediastinal compression can achieve a bronchogenic cyst, a giant left atrium, oesophageal tumours or mediastinal lymphadenopathies, including lymphomas.(2) Some of them can pierce the trachea. A case of diffuse large B-cell thyroid lymphoma with tracheal invasion and then perforation was recently published.(3) Our patient had an enlarged thyroid. If thyroid volume increases rapidly a thyroid lymphoma should be suspected, especially in patients with Hashimoto's thyroiditis.(4)

The most frequent type of thyroid lymphoma is diffuse large B cell lymphoma, which is more aggressive as mucosa-associated lymphoid tissue (MALT) lymphoma.(4) But the survival of patients with thyroid diffuse large B cell lymphoma was superior comparing to patients with other location of this type of lymphoma.(5) Our patient had a thyroid MALT lymphoma. The infection with Helicobacter pylori is often involved in the pathogenesis of this type of lymphoma. The most frequent location of this lymphoma is the stomach, but

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it can be found also in balder, breast, lung, salivary and thyroid gland, orbital annexes, skin or other tissues. If these patients have genetic lesions, the nuclear factor-κB pathway is activated frequently and the result is the excessive proliferation of lymphomatous cells.(6,7)

If the result of fine-needle aspiration guided by ultrasonography is inconclusive, the patient can be explored by core needle biopsy guided by ultrasonography. However, 36% of thyroid nodules can be diagnosed either by this method.(8) If the diagnosis of our patient's lymphoma had been made by needle aspiration, we would treat the patient with chemotherapy followed by radiotherapy. Because thyroidectomy was done, we just continued with chemotherapy + rituximab. A case with similar histology was recently published. The patient received the same treatment and after one year of follow-up he is alive with no sign of disease recurrence. Unfortunately, the treatment and follow-up of these patients is not yet standardized.(9)

A study made on 487 patients with thyroid diffuse large B-cell lymphoma concluded that surgery or radiotherapy added to chemotherapy may improve survival of these patients if lymphoma is in stages I/II. Risk of death was not influenced by the absence of surgery or radiotherapy.(5) In another study made on 450 patients with extranodal non-Hodgkin lymphomas, 2% had thyroid location. The patients with primary thyroid lymphoma had better outcome than those with other location.(10)

Patients with hematologic malignancies often have genomic instability and are at risk to develop second or third neoplasia. Such an event should be considered in all patients who need to be monitored from this point of view. The thyroid may be affected secondary in the evolution of chronic lymphocytic leukemia or lymphomas. One such case was recently published. A female patient was diagnosed with chronic lymphocytic B-cell leukemia based on a lymph node biopsy. After eight months, during chemotherapy, her thyroid became asymmetrical and new lymph nods appeared on the left side of the neck. The thyroid biopsy and the serum flowcytometry established the diagnosis of small lymphocytic B-cell lymphoma. The cytogenetic examination established the presence of 17p deletion. As expected, the evolution under alemtuzumab was unfavourable.(11)

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