Lymphoma of Mucosa-associated Lymphoid Tissue
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Section: Chest imaging
Imaging Technique: CT
Case Type: Clinical Cases
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Patient: 70 years, female

Clinical History:

was admitted for evaluation of a tumor of the lacrymal gland. Medical history included gastric lymphoma, which was treated by normal gastrectomy, 4 years previously. CT scan of the chest was performed before and after therapy.

Imaging Findings:

The patient was admitted for evaluation of a tumor of the lacrymal gland. Medical history included gastric lymphoma, which was treated by normal gastrectomy, 4 years previously. CT scan of the chest was performed before and after therapy.

Chest radiography (AP projection) shows bilateral interstitial infiltration with predominantly central distribution.

High resolution CT scan of the lungs demonstrates multiple interstitial peribronchovascular nodules, 2 to 3 mm in diameter, with central and subpleural distribution.

On conventional CT scan of the lungs obtained after six regimens of chemotherapy (same level as in fig. 2), most of the peribronchovascular lesions have vanished.

A biopsy of the lacrymal gland was performed. Histological examinations showed Lymphoma of Mucosa-Associated Lymphoid Tissue (MALT), which was consistent with the histological diagnosis of the resected gastric tumor. Pulmonary CT findings were consistent with Lymphoma of Bronchus-Associated Lymphoid Tissue (BALT), as the nodules appeared in the usual location of normal lymphoid tissue in the lung. Most of the lesions disappeared after chemotherapy.

Discussion:

Maltoma accounts for 85% of extra-nodal non-Hodgkin lymphomas. These tumors arise in the gastrointestinal tract or other mucosal organs, such as the lung, the salivary gland, the thymus, the thyroid and the lacrymal gland. Mucosa-Associated Lymphoid Tissue may be a normal component in the mucosa of the intestine (GALT) and bronchi of neonatal lung (BALT). It may be acquired in chronic gastritis, Hashimoto thyroiditis and Sjögren syndrome. The great majority of Maltomas are from B-cell origin. In Western countries, B-cell gastric lymphoma is the most common. Histology of low grade B-cell lymphoma shows three main components: epithelial infiltrate of centrocyte-like cells (specific lymphoepithelial lesions), plasma cells and reactive B-cell follicles, which may simulate a benign lymphoid infiltrate, called in the past "pseudolymphoma". The clinical features are characterized by a slow evolution of the lesions. The disease exhibits a better prognosis than lymphoma. Primary lymphoma of Bronchus-Associated Lymphoid Tissue (BALT) occurs in about 3.6 percent of all extra-nodal non-Hodgkin lymphomas. Pathology is characterized by multiple small nodular infiltrates of lymphoid cells, less than 5 mm in diameter with a primary peribronchial distribution, followed by extension into the septal interstitium and vascular wall invasion. CT
scan shows peribronchovascular distribution of nodules, 2 to 4 mm in diameter, associated with bronchiectasis and bronchial wall thickening. In correlation with the clinical history, CT findings can suggest the diagnosis of lymphomatous infiltration and guide transbronchial biopsy.

**Differential Diagnosis List:** Lymphoma of mucosa-associated lymphoid tissue

**Final Diagnosis:** Lymphoma of mucosa-associated lymphoid tissue

**References:**


**Figure 1**

Description: (AP projection) shows bilateral interstitial infiltration with predominantly central distribution.

Origin:
**Description:** demonstrates multiple interstitial peribronchovascular nodules, 2 to 3 mm in diameter, with central and subpleural distribution. **Origin:**

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**Figure 3**

**Description:** of the lungs obtained after six regimens of chemotherapy (same level as in fig. 2), most of the peribronchovascular lesions have vanished. **Origin:**