Abstract. A 55-year-old male patient was admitted to our department with complaints of dysphagia and throat soreness for 2 months. A tumor of the left epiglottis, with an irregular surface, was identified by video laryngoscopy. The diagnosis of malignant lymphoma was confirmed by biopsy during laryngomicrosurgery. The atypical diffuse lymphocytic lymphoma was positive for CD20 and Bcl-2, and negative for CD3, CD10 and Bcl-1. The diagnosis was diffuse large B-cell malignant lymphoma. The patient was treated with eight cycles of rituximab with cyclophosphamide + doxorubicin + vincristine + prednisolone (R-CHOP regimen). This is a rare case of extranodal non-Hodgkin lymphoma occurring in the epiglottis.

Introduction

Lymphomas constitute a group of blood cell tumors that develop from lymphatic cells (1). There are numerous subtypes of lymphomas (2), with the two main categories being Hodgkin’s lymphoma (HL) and non-Hodgkin lymphomas (NHLs) (3). Approximately 90% of lymphomas are NHLs, with diffuse large B-cell lymphoma (DLBCL) being the most common type (3).

DLBCL occurs primarily in older individuals, with a median age at diagnosis of ~70 years (4), although it may also occur in children and young adults in rare cases (5). DLBCL is an aggressive tumor, which may arise in virtually any part of the body (6). Extranodal NHL occurring primarily in the epiglottis is extremely rare, accounting for merely 0.7% of all NHLs and 1% of malignant laryngeal tumors (7). We herein present a rare case of DLBCL involving the epiglottis.

Case report

A 55-year-old previously healthy man presented with complaints of dysphagia and throat soreness for 2 months. The patient did not have a history of fever, night sweats, body weight loss or fatigue. On examination of the neck, no palpable mass was detected and the overlying skin was not erythematous or warm to the touch. On intraoral examination, there were no specific findings. Video laryngoscopy revealed a left epiglottic tumor with an irregular surface (Fig. 1). The hematological tests were normal, apart from increased erythrocyte sedimentation rate. Blood smear examination revealed no evidence of blast cells. The renal and liver function tests were normal and the patient was HIV-negative.

The diagnosis of malignant lymphoma was confirmed by biopsy during laryngomicrosurgery. The specimen’s 90% of lymphomas are lymphoma, extranodal non-Hodgkin lymphoma, epiglottis, laryngeal lymphoma

Discussion

The symptoms of lymphoma may include enlarged lymph nodes, fever, cold sweats, weight loss, pruritus and fatigue (8,9). However, our patient did not present with any of those symptoms.
There are numerous subtypes of lymphoma, the main two being HL and NHL (2). NHLs constitute a heterogeneous group of malignancies characterized by abnormal clonal proliferation of T cells, B cells, or both. Approximately 90% of lymphomas are NHLs (3). The risk factors for common types of NHL include autoimmune diseases, HIV/AIDS, infection with human T-lymphotropic virus, consuming large amounts of meat and fat, immunosuppressive medications and certain pesticides (9). The diagnosis is usually confirmed by lymph node biopsy. Blood, urine and bone marrow tests may also be useful for diagnosis. Imaging may then be performed to determine whether the cancer has spread and to which location. Spread most commonly occurs to the lungs, liver and/or brain (9). The head and neck is the second most common region for extranodal lymphoma, the first being the gastrointestinal tract (10). Extranodal NHLs occurring primarily in the epiglottis are extremely rare, accounting for merely 0.7% of all NHLs and 1% of malignant laryngeal tumors (7). Supraglottic cancer is almost exclusively squamous cell carcinoma. Therefore, our case of DLBCL in the left epiglottis is very rare. The treatment of lymphoma may combine chemotherapy, radiation therapy, targeted therapy, surgery and other methods (8). R-CHOP is the most common chemotherapeutic regimen for NHL and our patient was scheduled to receive eight cycles over 4-6 weeks. In the United States, the overall 5-year survival rate of HL is ~85% (11) and

Figure 1. Left epiglottic tumor with irregular surface.

Figure 2. The atypical large lymphocytes were diffusely positive for CD20 and Bcl-2, and negative for CD3, CD10 and Bcl-1, indicating the diagnosis of diffuse large B-cell malignant lymphoma. (A) Tumor cells (hematoxylin and eosin stain; magnification, x1,000). Immunohistochemical staining for (B) CD20 (magnification, x400); (C) CD3 (magnification, x400); and (D) Bcl-2 (magnification, x400).
of NHL ~69% (12). According to the international prognostic index established for patients aged <60 years, the outcome of patients with extranodal DLBCL is similar to that of patients with nodal DLBCL (13).

In conclusion, we presented a case of rare primary extranodal NHL of the epiglottis. The patient is currently under treatment with the R-CHOP regimen, and has received three cycles of chemotherapy to date.

References