Inflammatory tumor of the base of the tongue as a clinical presentation of HIV infection

Guz zapalny nasady języka jako jedyna manifestacja zakażenia wirusem HIV

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ABSTRACT:
Introduction: AIDS is a fatal disease that impairs the immunity, increasing the risk of developing opportunistic infections.

Case report: We present a case of a 47-year-old patient from the ER, with bleeding from a tongue tumor. The patient reported that he had lost 25 kg in about six months and complained of swallowing disorders. HIV infection was confirmed in the patient during the diagnosis. The inflammatory tumor of the tongue was the only manifestation of HIV infection.

KEYWORDS: emergency room, HIV, tongue tumor

INTRODUCTION
Acquired immunodeficiency syndrome (AIDS) is a lethal disease compromising the immune system, which leads to an increased risk of opportunistic infections. Sometimes the laryngologist is the first physician to make the diagnosis.

We present the following case report to raise awareness about non-specific symptoms of an human immunodeficiency virus (HIV) infection.
tissues, located at the base of the tongue and reaching the tonsil, the posterior and later pharyngeal walls. The tumor was reaching epiglottis without infiltrating it. Multiple biopsy samples were taken, both superficial and deep.

Antibiotics were commenced and diagnostic tests were ordered. The computed tomography (CT) scans showed an extensive infiltration of the tongue occupying the base, located in the midline and about 44 x 45 x 24 mm in size, which showed signs of disintegration. Also, enlarged lymph nodes up to 26 mm were identified. The reporting radiologist described the image as non-specific (differential diagnosis including inflammatory or malignant infiltration) and emphasized the need for further pathology study. The laboratory tests showed no significant abnormalities except for signs of dehydration. After two days of antibiotics and feeding via gastrostomy, the patient's condition improved significantly. The stench of the necrotic tissues and the trismus resolved, and the patient started do stand up from his bed.

Due to immense local and general improvement, additional laboratory tests were run including HIV screening, which was positive.

The pathology study did not confirm the diagnosis of malignancy, instead massive inflammation with focal necrosis was reported. Because the patient's condition improved and the tumor size decreased to about 1 cm, the second biopsy was planned. On direct laryngoscopy, healing was noticed with no signs of necrosis. The infiltration of the lateral and posterior pharyngeal wall resolved.

The patient was transferred to the Infectious Disease Hospital and antiretroviral therapy was instigated. The second pathology study, once again, showed no malignancy but inflammation.

The patient continues antiretroviral therapy. His condition gradually improved. He has remained under the outpatient care of our clinic for 10 months. The tracheostomy tube was removed two months after discharge. Over time, dysphagia resolved, the gastrostomy was removed and the patient started oral feeding. The scar on the tongue was noted in the location of the previous mass. Further evaluation revealed that the patient also suffered from schizophrenia and syphilis.

**DISCUSSION**

HIV infection/AIDS is widespread throughout many countries in the world. In 2012, around 35.3 million people worldwide tested positive for HIV, and there are about 2.3 million new cases annually [1].

HIV is an infection which compromises the immune system leading to opportunistic infections, neurological symptoms and malignancy. Oral and nasal lesions constitute a broad group of non-specific complains reported by patients. They can cause pain, discomfort, difficulty swallowing or even make swallowing impossible and lead to malnutrition and cachexia as presented in our patient. About 40.3% of HIV-positive patients report oral lesions [2, 3]. The spectrum of abnormalities includes candidiasis, herpes, shingles, hairy leukoplakia, recurrent aphthous stomatitis, xerostomia, Kaposi's sarcoma (KS), NHL (non-Hodgkin lymphoma), squamous cell carcinoma, gingivitis and periodontal disease [4].

In the study by Berberi et al. [5], fifty patients with confirmed HIV infection and oral lesions were evaluated. The most commonly identified lesion was pseudomembranous candidiasis accounting for 76% of cases (38/50), followed by periodontal disease – 34% (17/50). Four patients (8%) suffered from extensive oral ulcers.

Fang [6] reported a series of 20 HIV-positive patients with oral and esophageal ulcerations. Ulcers affected mainly the vestibule (10 cases), tonsils (3 cases) and epiglottis (3 cases). The treatment consisted of stabilizing T CD4(+) lymphocyte count, which took between 2 weeks and 3 months when the patients received highly active antiretroviral therapy (HAART) along with immunomodulation, analgesics, anti-inflammatory and antifungal agents.

Li [7] reported 55 cases of patients with otolaryngological manifestation of HIV infection. The most common empty symptom was parotid swelling (30.9%). A similar number of patients presented with Kaposi's sarcoma of the nose, oral cavity or pharynx. Neck tumor was present in 20% of patients, while oral tumor was present in 12.7%. Oral ulceration affected 10.9% of patients. In the study by Ramirez [8] conducted on 1,000 patients, HIV-related oral lesions affected 47.1% of patients. The most common pathologies included: oral candidiasis (36.1%), hairy leukoplakia (22.6%), erythematous candidiasis (21.0%) and pseudomembranous...
neous candidiasis (15.8%). Oral Kaposi’s sarcoma (2.3%), HIV-related periodontal disease (1.7%) and non-Hodgkin lymphoma (0.1%) were rare.

Prasad [9] studied a large group of HIV-infected individuals (986 patients), and found otorhinolaryngological symptoms in 79% of them. The lesions usually affected the oral cavity and pharynx (59%), usually oral candidiasis, less commonly nasal lesions (17%), and ear-related symptoms were present in 13% of patients, most commonly chronic supplicative otitis media.

Berberi [5] studied in details the relationship between the CD4+ count and oral lesions in HIV-positive patients, and concluded that 62% of lesions occurred with CD4+ < 200 cells/mm³, and about 26% of oral lesions were present with CD4+ count 201–499 cells/mm³. In 12% of patients, the lesions occurred despite normal CD4+ lymphocyte count. This was true in our patients as well.

Oral candidiasis is definitely the most common oral pathology in HIV-infected patients. It is assumed that it affects between 30% and 90% of patients [9]. In HIV-positive patients, another common oral pathology is major aphthous ulcers (a couple of cm in size). Their cause is unknown.

CONCLUSIONS

The presented case report is supposed to raise awareness among laryngologists about clinical symptoms suggestive of a HIV infection. The early diagnosis allows to introduce appropriate treatment, which improves the overall quality of life of the patients.

References