Tonsillar Kaposi Sarcoma in an HIV-Negative Patient: A Case Report

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Abstract
Kaposi’s sarcoma (KS) is a rare malignancy associated with AIDS and usually affects skin. The most common causative agent is the Human Herpes Virus Type 8 (HHV-8). In the literature, there are few case reports about KS with no association to AIDS. In this case report, we report a 72-year-old HIV (-) woman who presented to our clinic with a complaint of fast swelling in the right palatine tonsil and was histopathologically diagnosed as tonsillar KS.

Keywords: Palatine tonsil, Kaposi’s sarcoma, human herpes virus, histopathology

Introduction
Kaposi’s sarcoma (KS) was defined by Moritz Kaposi in 1872 (1). A multicentric mucocutaneous neoplasia originating in the endothelium, KS is reported to present in four clinical forms: classic, iatrogenic (post-transplant), endemic, and epidemic. It is a vascular tumor that can involve the skin, mucosa, the respiratory and the gastrointestinal systems (3). In the head and neck region KS is most often seen on the mucosa of the oral cavity, however, cases involving the mucosa of the pharynx, larynx and nasal cavity have also been identified. Oral Kaposi’s sarcoma (OKS) is most often seen on the hard and the soft palates, the gingiva, and the dorsum of the tongue (4). Isolated involvement of the tonsils is rarely seen in KS (3).

In this report we present the case of a 72-year-old HIV (-) woman who presented with a fast-growing swelling on the right tonsil and was diagnosed with KS following diagnostic tonsillectomy.

Case Presentation
The 72-year-old patient presented with a complaint of a growing swelling on her right tonsil that had first appeared three months earlier. The patient reported that she had received antibiotic treatment several times. Examination of the patient showed a non-ulcerated, irregularly-contoured submucosal mass of about 3x4 cm advancing from the right tonsil toward the hypopharynx (Figure 1). Magnetic resonance imaging (MRI) of the neck revealed a solid mass of 50x28 mm with lobulated contours and showing intense contrast involvement that significantly narrowed the oropharyngeal airway at the level of the right tonsil. The mass was seen to have invaded the palatopharyngeus to the right and the constrictor muscle of the pharynx to the left. The mass had advanced toward the right anterior tongue base and generalized lymphadenopathy with a largest mass of 28x15 mm was observed on the right cervical chain (Figure 2).

Right tonsillectomy was performed under general anesthesia. The tonsil material was at 4x3x1 cm diameter and had an irregular shape with whitish color. Histopathologic examination revealed reactive follicle structures with distinct germinal centers. Also cleft-like gaps and erythrocyte extravasation was seen. Presence of atypical mitosis was observed. Immunohistochemical examination identified pancytokeratin (-), CD34, CD31,
FLI-1 (+), Human herpes virus 8 (HHV-8) positivity, and Ki67 proliferation index at 20%. (Figure 3). Histopathologic examination concluded to a Kaposi’s sarcoma. Complete blood count, and routine laboratory tests including liver and renal functions did not reveal any pathologies. Her HIV test result was negative. Positron emission tomography/computed tomography examination was performed to investigate the possibility of additional organ or tissue involvements and to identify the stage of the disease. The examination revealed increased malignant metabolic activity in the mass lesion in the right tonsillar region, the right superior jugular and the right subclavicular nodes (Figure 4). The patient was referred to the oncology clinic where she was prescribed a chemotherapeutic agent (paclitaxel, Biolek medical, Ukraine). The patient was regularly followed both by the oncology and otorhinolaryngology clinics, and recurrence was not seen in the first postoperative year. Informed consent was obtained from the patient for this report.

**Discussion**

Kaposi’s sarcoma is a malignancy that commonly presents together with AIDS. KS incidence in the non–HIV-positive population is 1/100,000, whereas this rate is 1/20 in the HIV-positive population (5).

Oropharyngeal KS, particularly isolated KS of the tonsils is rare with only a few cases reported in the literature. Sikora et
Kaposi’s sarcoma can be treated with radiotherapy, chemotherapy, interferon, or surgery. High activity antiretroviral therapy or a combination of this treatment can be considered in HIV-positive patients. High activity antiretroviral therapy was not considered in our patient since it is a treatment modality used in AIDS-associated KS cases. Chemotherapy may be administered locally (intraleSIONal injections) or systemically (intravenous). Local bleomycin, cisplatin or vinblastine chemotherapy can provide a complete or partial response to cutaneous KS. Various agents such as vincristine, vinblastine, etoposide, bleomycin, docetaxel and paclitaxel can be used in systemic therapy. Paclitaxel has strong antiangiogenic activity that can express its efficacy on KS lesions (12). Medical Oncology department treated the patient with systemic paclitaxel therapy. No recurrence was detected during the one-year regular follow-up visits of the patient.

**Conclusion**

Kaposi’s sarcoma should be borne in mind as a differential diagnosis in patients who present with a unilateral growth of the tonsil.

**Informed Consent:** Written informed consent was obtained from the patient who participated in this study.

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**References**
