

The effect of low doses of verapamil on the course of Kaposi's sarcoma

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Abstract

The article presents a case of a 75-year-old male patient who fell ill with Kaposi's sarcoma at the age of 60. He had small formations in the second stage of sarcoma, which were removed with liquid nitrogen, but the disease passed into the third stage, in which the patient no longer received any treatment of his own free will. The patient is diagnosed with classic Kaposi's sarcoma, which has passed the spotty, popular and tumor stages of the disease over 12 years. Before the use of low doses of verapamil- hydrochloride (40 mg in a tablet), tumor nodes with a diameter of up to 5 cm appeared in the patient's lower extremities, which disappeared after 2-3 months, and new nodes appeared nearby, while there was no pattern in their appearance - disappearance was traced.

Introduction

Disease Kaposi's sarcoma is a relatively rare nosology, often associated with suppression of the immune system in AIDS, organ transplants, and chemotherapy interventions. It has been proven that this disease is caused by the herpes simplex virus type 8. With Kaposi's sarcoma, an unmistakable diagnosis is often made without histological verification by typical appearance. In addition, unlike malignant tumors of other genesis, Kaposi's sarcoma is often not treated, since a complete cure is rarely achieved, using only palliative treatment to reduce the symptoms of the disease. The 5-year survival rate for people with localized sarcoma is 81%, and for people with locally advanced sarcoma it is 57%. 15% of sarcomas can metastasize.

Case presentation

Considering our successful experience in the treatment of malignant brain gliomas with low concentrations of verapamil-hydrochloride, since 2018 the patient began to receive daily treatment with verapamil-hydrochloride 3 times a day on an ongoing basis. The dosage of the drug was the same as for patients with brain glioblastomas. Observation of the patient for 3 and a half years showed that verapamil- hydrochloride had an antitumor effect in the case of Kaposi's sarcoma. Large-diameter tumor nodules disappeared within 1 year of treatment, after the first year only nodules less than 0.5 cm in diameter appeared, and in 2021, rarely single nodules appeared, which quickly dried up and disappeared. This improved the quality of patient life who had major problems with walking. He began to walk without difficulty, the nodules did not interfere with wearing the usual, before the illness, type of shoes. The patient confirms the positive effect of using low concentrations of verapamil- hydrochloride in this type of disease.

Discussion

It is worth noting the significant role of tumor-associated inflammation in the growth and progression of various tumor origins [1-3], while low concentrations of verapamil-hydrochloride reduce the level of blood cell aggregation (stage II of inflammatory process), helping to suppress inflammation and thereby exerting an antitumor effect

Our studies early have shown the mechanism of progression of malignant brain gliomas, which consists in the relationship between the transmembrane potential of peripheral blood cells and their quantitative and qualitative cellular compositions [4,5]. Low concentrations of verapami- hydrochloride inhibit the processes of epithelial-mesenchymal transition in nucleus-containing blood cells, suppressing tumor-associated inflammation and further progression of the tumor process. This study confirms the universal mechanism of action of verapamil-hydrochloride at low concentrations on various types of tumors.

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