



Alina Vilkaite<sup>1</sup>, Gabriele Vangelyte<sup>1</sup>, Vesta Kučinskiene<sup>1</sup>, Skaidra Valiukeviciene<sup>1</sup>, Jurgita Makstiene<sup>2</sup>

<sup>1</sup> Department of Skin and Venereal Diseases, Lithuanian University of Health Sciences, Kaunas; <sup>2</sup> Department of Pathology, Lithuanian University of Health Sciences (LUHS), Hospital of LUHS Kauno Klinikos, Kaunas

## BACKGROUND

Kaposi's sarcoma (KS) occurs in patients infected by the human herpesvirus 8 (HHV-8), and the level of immunosuppression is the main factor for the development and progression of the disease. Four clinical subtypes of KS are identified: classic, endemic, epidemic and iatrogenic. We present two different clinical subtypes of KS diagnosed in the Department of Skin and Venereal Diseases, Hospital of LUHS.

### CLINICAL CASE OF CLASSIC KS

A 87-years-old male presented with pigmented, flat, asymptomatic macule on the left ankle (Fig.1, 2, 3). An excisional biopsy showed the proliferation of spindle cells (Fig.4), perivascular extravasation of erythrocytes (Fig.5). Immunohistochemistry of the spindle cells using antibodies against vascular endothelial marker CD34 showed a positive reaction (Fig.7). It revealed the vascular nature of the skin lesion with positive staining for HHV-8 (Fig.8). The diagnosis of localized non-aggressive KS was made. One month after operation the same lesions started to spread on both lower extremities. Serology for HIV was negative, standard blood test, CD4 count was normal, chest and abdomen CT scan did not reveal dissemination of the disease. These findings and absence of immunosuppressant therapy in the patient's medical history confirmed the classic form of Kaposi's sarcoma. Oncodermatology multidisciplinary team decided to continue local therapy with radiation without surgical intervention.



Fig.1



Fig.2



Fig.3

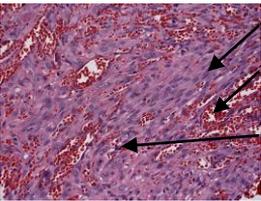


Fig.4 Spindle cells

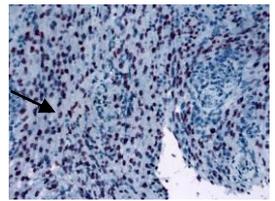
Fig.5 Extravasation of erythrocytes

Fig.6 Mitoses



Fig.7 Positive reaction with vascular endothelial marker CD34

Fig.8 Nuclear positive staining for HHV-8



### CLINICAL CASE OF EPIDEMIC KS

A 58-years-old man came to dermatovenereologist because of the nodules on the face (Fig.1, 2). Histology from the facial lesion showed epidermal hyperplasia with blurry focal acanthosis, hyperkeratosis, and parakeratosis. In the derma spindle-shaped cells formed tumor which contacts with epidermis. Immunohistochemistry: HHV8 positive. The diagnosis of KS in tumor stage was made. The serology for HIV was positive. Tests for syphilis, hepatitis B and C were negative. The patient was referred to infectionist for HIV treatment and follow up.

Fig.1



Fig.2



## CONCLUSION

Our reported cases showed different subtypes of KS with positive HHV-8. Transmission of this virus is not understood fully, so no specific interventions are currently recommended to prevent HHV-8, also KS. Radiotherapy is one of the most effective treatments for all forms of localized KS. It is important to suppress HIV replication and maintain the immune function to avoid developing KS in patients with HIV infection.