



Kaposi Sarcoma of the Ear in HIV-Negative Patients

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To the Editor,

With great interest we have read the article from Agaimy et al. describing 11 cases of Kaposi sarcoma in the head and neck area [1]. Special attention was elicited by two cases from the ear in HIV-negative patients. We recently encountered a similar case in a 79-years old male with a solitary nodule on the left ear's concha. The patient underwent surgical tumor resection. Intraoperative frozen section analysis revealed atypical spindle cell proliferation. On formalin-fixed paraffin-embedded sectioning, the lesion showed a lobulated, but relatively circumscribed spindle cell proliferation with some atypical, hyperchrome cells and increased mitotic activity, but without morphologically obvious endothelial differentiation (Fig. 1a, b). No significant actinic damage was noted. Immunohistochemistry demonstrated strong positivity for CD34, at least partial expression of ERG (Fig. 1c, d), and strong nuclear positivity for HHV8 (Fig. 1e). Therefore, an unusual Kaposi sarcoma of the concha was diagnosed. HIV testing was negative and

positron emission tomography with computed tomography (PET/CT) excluded presence of regional and distant disease. The patient was presented at the local head and neck and sarcoma tumor boards and local external beam radiotherapy with $20 \times 2 \text{ Gy} = 40 \text{ Gy}$ was given postoperatively. The patient remains free of disease after 15 months of clinical and radiological follow-up.

While the exact pathogenesis of Kaposi sarcoma in HIV-negative patients remains largely unelucidated, a lessening of the immunosurveillance abilities of the patient seems to be critical. Interestingly, our patient suffers from a low-grade non-Hodgkin lymphoma (currently not under therapy). This could be, along with immunosenescence, a possible clinical hint for some degree of immunosuppression.

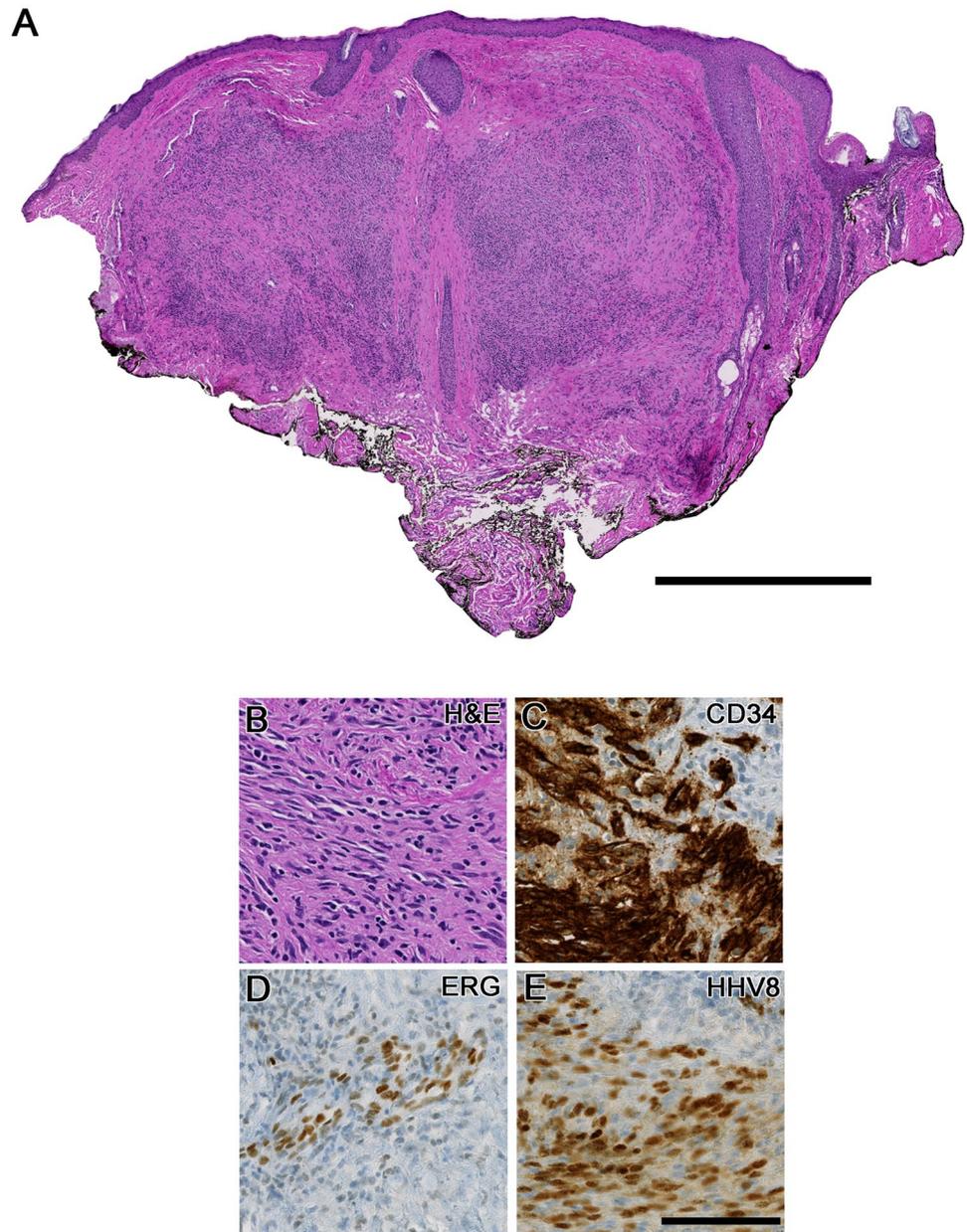
In summary, we think this case corroborates the fact, that the ear/concha of the ear seems to be, for unknown reasons, a predilection site for Kaposi sarcoma in HIV-negative patients. This should be kept in mind, especially when dealing with sarcomatoid tumors of the ear.

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Fig. 1 **a** An H&E overview of the lobulated spindle cell proliferation, predominantly in the dermis of the left ear's concha skin. In **b** the magnification depicts atypical spindle cells, growing in a fascicular pattern, without morphologically clear-cut endothelial differentiation. **c** and **d** corroborating an endothelial differentiation with strong positivity for CD34 and at least partial expression of ERG. **e** Rendering the diagnosis of Kaposi sarcoma with strong nuclear positivity for HHV8. Scale bar (large) 1 mm. Scale bar (small) 100 μ m



Compliance with Ethical Standards

Conflict of interest All authors declare that they have no conflict of interest.

Ethical Approval The patient provided a written informed consent in accordance with the declaration of Helsinki.

Reference

1. Agaimy A, Mueller SK, Harrer T, Bauer S, Thompson LDR. Head and neck kaposi sarcoma: clinicopathological analysis of 11 cases. *Head Neck Pathol.* 2018. <https://doi.org/10.1007/s12105-018-0902-x>.