



CASUISTIC PAPER

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Metastasis of cancer from Merkel cells to the thyroid gland

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ABSTRACT

Introduction. Merkel cell carcinoma (MCC) is a rare and aggressive neuroendocrine skin cancer.

Aim. Herein described is a case of hypertensive patient, after removal of Merkel cancer of the left gluteus skin (2011), after pulmonary embolism (2013), with degenerative changes of the spine and uterine myoma, chronically treated with Warfarin, because of suspected thyroid cancer.

Description of the case. A 70-year-old woman case after removing Merkel cancer of the left buttock skin (2011), after pulmonary embolism (2013), with degenerative changes of the spine and uterine fibroids treated chronically with Warfarin because of suspected thyroid cancer is described.

Conclusion. Increasing evidence of Merkel cell carcinoma with immunodeficiency and neoplasia, and the management and outcome of these patients requires study.

Keywords. Merkel cells, metastasis of cancer, thyroid gland

Introduction

Merkel cell carcinoma (MCC) is a rare skin cancer that mainly affects older people (median age is 69 years), white skin with light complexion. This tumor tends to resume locally and metastasize to regional lymph nodes.^{1,2} The most common is formed in the dermis and infiltrates subcutaneous tissue. The diagnosis of MCC by means of light microscopy is difficult, there-

fore pathologists support immunohistochemistry and electron microscopy.³ In the United States, about 1,500 cases are diagnosed. Due to the rarity of this cancer, we do not have fixed schedules. Although several studies conducted since 2000 have used population-based data sources to investigate the epidemiology of MCC, many studies lacked diagnostic and therapeutic data, and therefore the impact on the relapse and survival of

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MCC could not be investigated to help improve treatment of the disease.⁵⁻⁸

Aim

The aim of this work was histopathological study of Merkel cancer cells. We describe a case an 70-year-old woman with hypertension and degenerative changes of the spine and uterine fibroids.

Description of the case

A 70-year-old woman with hypertension admitted to the Department of Internal Diseases was admitted after removing Merkel cancer of the left buttock skin (2011), after pulmonary embolism (2013), with degenerative changes of the spine and uterine fibroids treated chronically with Warfarin because of suspected thyroid cancer. In thyroid biopsy, atypical, probably cancer cells have been described. In the laryngological consultation it was found that there was no mobility of the right half of the larynx. In the CT scan of the neck and chest, in the right thyroid lobe there was a change in TU, modeling neck organs. The change went down behind the sternum, reaching the level of the aortic arch, surrounding the brachiocephalic trunk and its branches, with the narrowing of the right cervical lumen to min. 6 mm; the inner and outer jugular veins on the right side were not contrasted. In abdominal CT, bilateral adrenocortical tumors with high durability were found bilaterally. Due to the necessity of thyroid surgery, the patient was prepared for annihilation urgently and transferred to the Department of Surgery. Operational failure was found to be inoperable. Samples were removed and tracheostomy performed. On the second day after the procedure, the patient was operated on due to dyspnea. Due to the result of histopathological examination - metastasis of cancer from Merkel's cells, the patient was consulted with the Department of Soft Tissue Cancer, Bone and Melanoma in Warsaw. After the oncological consul-

tation, the patient was disqualified from chemo/radiotherapy treatment due to poor general condition. After disqualification, the patient was transferred to the Palliative Department.

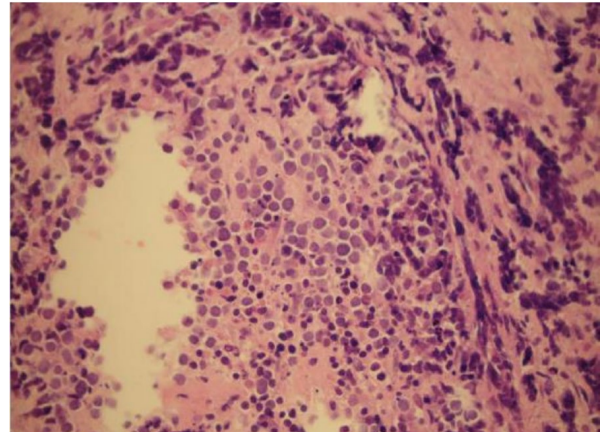


Fig. 2. Infiltrate of signaling cells in metastasis of cancer from Merkel's cells (H&E, 400x)

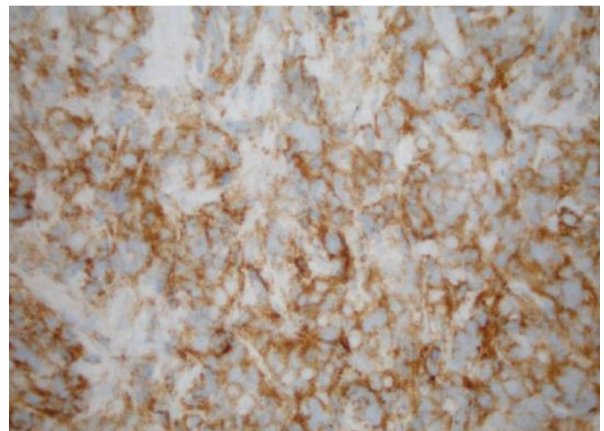


Fig. 3. Infiltrate of signaling cells in metastasis of cancer from Merkel's cells, D56 (40x)

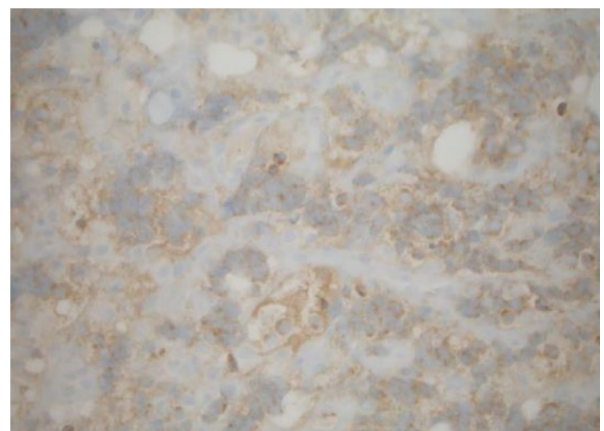


Fig. 4. Infiltrate of signaling cells in metastasis of cancer from Merkel's cells, Synaptophysin (40x)

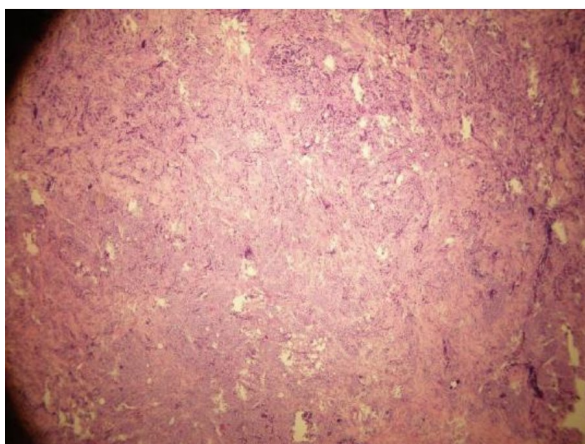


Fig. 1. Infiltrate of signaling cells in metastasis of cancer from Merkel's cells (H&E, 40x)

Despite the fact that the cancer of Merkel cells is a rare cancer, it is an important problem because we do

not really know how to deal with patients. It is a challenge not only for clinicians who have problems with establishing chemo- and radiotherapy, and for histopathologists because of its similarity to other cancers (Figures 1-5).

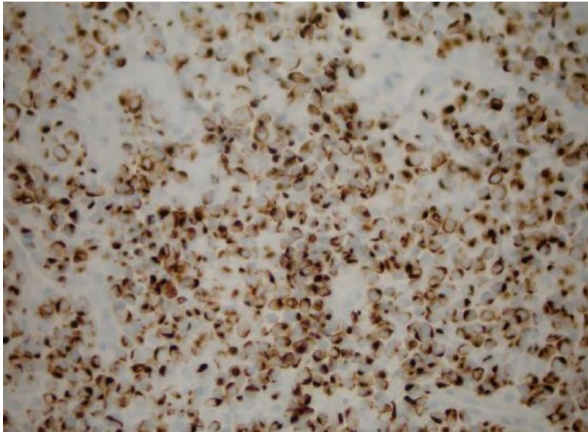


Fig. 5. Infiltrate of signaling cells in metastasis of cancer from Merkel's cells, CK-20 (40x)

Discussion

Recently, there have been studies stating that patients with an unknown primary site have a better prognosis, both relapse and survival.^{9,10} MCC rarely affects the thyroid, so far there are only three such cases in the literature.¹¹ Differential diagnosis covers a wide spectrum of changes. From cancers originally originating from the skin - basal cell carcinoma, generalized diseases - lymphomas, metastases from other organs - small cell lung carcinoma. MCC rarely affects the thyroid, so far there are only three such cases in the literature.¹¹ Differential diagnosis covers a wide spectrum of changes. From primary cancers - basal cell carcinoma, generalized diseases - lymphomas, metastases from other organs - small cell lung cancer.

Conclusion

The prognosis in this cancer is poor, with a high mortality rate in the case of distant metastases. Metastasis to the thyroid gland is very rare and may present diagnostic difficulties.

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