



Merkel cell carcinoma appearing 9 years after kidney transplantation

<u>Tomislav Brajković</u>¹, Krunoslav Budimir¹, Stjepan Skok¹, Bojana Maksimović, MD, PhD

1 School of Medicine, University of Zagreb, Zagreb, Croatia 2 Department of Internal Medicine, Division of Nephrology, University Hospital Merkur, Zagreb, Croatia

Keywords:

immunosuppression, kidney transplantation, Merkel cell carcinoma

Background:

Merkel cell carcinoma (MCC) is a rare, highly aggressive skin cancer with neuroendocrine features. Immunosuppressants that are administered after transplantation can increase the risk of Merkel cell carcinoma.

Case presentation:

A 52 -year-old woman presented with an asymptomatic nodule in the left gluteal region 9 years after kidney transplantation. Surgical excision of the nodule was performed. Histopathologic and immunohistochemistry examinations confirmed the nodule to be an MCC. No residual MCC cells were detected at the surgical margins after surgical resection. No metastases were detected in an inguinal sentinel lymph node biopsy (SNLB) specimen. Staging showed no signs of metastatic disease. Since the concentration of serum chromogranin A remained elevated, it was decided to start octreotide treatment in a dose of 90 mg. However, after 2 years of remission, another nodule appeared on the skin of the left infrascapular region. Surgical excision of the lesion was performed, combined with an SNLB of the left axilla. Histopathologic examination confirmed it to be a metastasis of MCC. Surgical margins were clear and no metastases were detected in sentinel lymph nodes. Then, she underwent postsurgical adjuvant radiotherapy of left infrascapular region, consisting of 3000 cGy in 10 fractions. The cancer is currently in remission; the most recent whole body PET CT showed no signs of active disease. Before the cancer diagnosis, immunosuppression therapy consisted of tacrolimus, mycophenolate mofetil (1080 mg daily), and prednisone(5 mg daily). After the diagnosis, the decision was made to replace tacrolimus with everolimus (0.5 mg daily). Throughout the entire treatment, the function of the graft remained intact, with a glomerular filtration rate estimated to be 56 ml/ $min/1.73 m^2$.

Conclusion:

This case highlights the importance of early tumor diagnosis and the complexity of the treatment in transplanted patients with the aim of achieving tumor remission while simultaneously preserving graft function.