Merkel Cell Carcinoma: Case Report

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ABSTRACT

Merkel cell carcinoma (MCC) is a rare, aggressive neuroendocrine carcinoma of the skin. Although it is 40 times less common than malignant melanoma, its mortality is much higher compared to melanoma. From 1986 to 2001 there was rapidly increasing incidence in reported cases of MCC, with a tripling in the rate over this 15-year period. The vast majority of MCC presents on sun-exposed skin. The head and neck area is the most common site of tumor occurrence. We present 70-year old female patient with painless red-colored nodule, size 2x2x2 cm on the dorsal side of mid left forearm. The surgical excision with negative margins was performed, and pathohistological analysis confirmed Merkel cell carcinoma. Sentinel lymph node biopsy was negative. In conclusion, as MCC is a very aggressive rare skin carcinoma with lethal outcome, it should be mandatory to perform biopsies of any suspected skin lesion.

Key words: carcinoma, merkel cell, photosensitivity, skin neoplasms

Introduction

Merkel cell carcinoma (MCC) is an aggressive neuroendocrine carcinoma with a propensity for local recurrence, regional lymph node metastasis, and fatal metastatic disease. Toker was the first to describe this tumor in 1972. It is the skin cancer with a mortality of approximately 33% at 3 year, higher than that of melanoma (approximately 15%). Data from epidemiology show a three-fold increase in MCC from 0.15 to 0.44 per 100 000 annually from the years 1986 to 2001. Several factors likely contribute to this including an aging population, increased aggregate sun exposure and a higher number of immune suppressed individuals. The diagnosis of MCC is rarely made clinically. These lesions are often mistaken for basal cell carcinomas, cysts, squamous cell carcinoma, and cutaneous lymphoma. Furthermore, the advent of the immunohistochemical marker cytokeratin-20 (CK-20) improved recognition of this disease and demonstrating the characteristic »neurosecretory granules within cytoplasmic extensions«. Treatment of MCC is controversial. The surgical excision with negative margins is the first treatment and adjuvant local irradiation now is well established but regional adjuvant (lymph nodes dissection or radiation therapy) remains discussed.

We present a 70-year old female patient with skin nodule, size 2x2x2 cm on the dorsal side of mid left forearm. The surgical excision with negative margins was performed, and pathohistological analysis confirmed Merkel cell carcinoma. Sentinel lymph node biopsy was negative.

Case Report

Six months prior to hospital admission a 70-year old female noticed painless red – colored skin change on her left arm. In March 2009 she was referred to a dermatologist due to rapid growth of skin nodule (tumor). At the first visit painless red-colored skin nodule on the dorsal side of mid left forearm, size 2x2x2cm was found (Figure 1a and b). The patient had no history of fever, sweats, weight loss or fatigue. She has diagnosed hypertension and non-insulin-dependent diabetes mellitus for eight years. The patient was admitted to our Department of Dermatovenerology for further examinations. Routine laboratory tests revealed only sideropenic anemia and hyperglycemia. Therefore gastrointestinal endoscopic
examinations were performed and revealed ventricular erosions while tumor was excluded. In addition, stool tests for occult bleeding were negative, as well as tumor markers. Chest radiograph and abdominal ultrasound findings were normal.

The skin tumor was surgically removed completely and pathohystological diagnosis was Merkel cell carcinoma (MCC). Immunohystochemical staining showed tumor cells positive for neuron-specific enolase (NSE) with perinuclear expression of cytokeratin 20 and neurofilament. Sentinel lymph node biopsy (SLNB) is generally accepted method in determining status of lymph nodes in patients with malignant melanoma, hence SLNB was performed in our patient to obtain staging and prognosis of MCC. SLNB was negative; therefore disease was localized on primary skin lesion (stage II).

Sentinel lymph node biopsy was negative; accordingly disease was localized on primary skin lesion (stage II). There is no explicit algorithm for local radiological therapy in MCC stage I and II. We confer with oncologists which recommended no additional therapy for this patient after surgical excision of skin tumor. During the follow up in next 8 months there was no recurrence of tumor; and so we are planning to perform regular visits every 3–6 months.

Conclusion

MCC is a very aggressive rare skin carcinoma with lethal outcome, therefore it should be mandatory to perform biopsies of any suspected skin lesion.
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KARCINOM MERKELOVIH STANICA: PRIKAZ SLUČAJA

SAŽETAK