

# Merkel Cell Carcinoma of the Skin

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This month's quiz is based on the article "Merkel Cell Carcinoma of the Skin," which begins on page 1 of this issue. Choose the single best answer for each question.

1. Which of the following is the most common risk factor for Merkel cell carcinoma (MCC) of the skin?

- (A) Exposure to radiant infrared heat
- (B) Immunosuppression
- (C) Prior exposure to radiotherapy
- (D) Sun exposure
- (E) Treatment with methoxsalen and UV-A light

2. In which of the following locations is MCC most commonly found?

- (A) Buttocks
- (B) Extremities
- (C) Genitals
- (D) Head and neck
- (E) Trunk

3. A 74-year-old farmer with a 100 pack-year history of cigarette smoking presents with a skin lesion. On examination, the patient looks emaciated with severe bilateral temporal wasting. Skin examination reveals a 6-mm, elevated, painless red nodule on the left ala of his nose. All of the following statements are true EXCEPT

- (A) Amelanotic melanoma may present in the same fashion as MCC
- (B) The skin lesion could be benign and may not be connected to the patient's weight loss
- (C) The clinical examination findings establish the skin lesion as MCC
- (D) This patient is at risk for concurrent skin and lung cancer
- (E) This patient might have metastatic squamous cell cancer of the skin

4. MCC cytomorphologically resembles all of the following EXCEPT

- (A) Breast cancer
- (B) Carcinoid
- (C) Melanoma

- (D) Neuroblastoma
- (E) Small cell lung cancer

5. What is the incidence of MCC per 100,000 person-years in the United States?

- (A) 0.4
- (B) 2.4
- (C) 12.4
- (D) 22.4
- (E) 32.4

6. Which of the following statements regarding immunohistochemical stains of MCC is false?

- (A) Cytokeratin-20 is a marker of MCC and is positive in 89% to 100% of patients with either primary or metastatic disease
- (B) The majority of MCC tumors express Kit receptor tyrosine kinase (CD-117)
- (C) MCC expresses both epithelial and neuroendocrine markers on keratin immunoperoxidase staining
- (D) The presence or absence of certain individual immunohistochemical markers reliably diagnoses MCC
- (E) Thyroid transcription factor-1 is consistently negative in MCC

7. Which of the following statements regarding treatment of MCC is correct?

- (A) MCC is highly radiosensitive, and postoperative adjuvant radiotherapy has been proven to be effective
- (B) Mohs micrographic surgery is the gold standard of surgical excision
- (C) The optimal approach to treating patients with MCC is clearly outlined in the literature
- (D) Postoperative adjuvant chemotherapy has been proven to be effective in node-positive MCC
- (E) Standard treatment protocols are established to guide chemotherapy for MCC

For answers, see page 28.

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**Answers to the Clinical Review Quiz, which appears on page 27. The article on Merckel cell carcinoma of the skin begins on page 1.**

1. (D) Sun exposure
2. (D) Head and neck
3. (C) The clinical examination findings establish the skin lesion as MCC
4. (A) Breast cancer
5. (B) 2.4
6. (D) The presence or absence of certain individual immunohistochemical markers reliably diagnoses MCC
7. (A) MCC is highly radiosensitive, and postoperative adjuvant radiotherapy has been proven to be effective

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