

A Lesion Surrounded by the Rainbow: Merkel Cell Carcinoma

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Case Presentation

A 76-year-old male presented due to a mass on his left leg, which had appeared three months earlier. A firm 1 cm purple nodule was observed on the left thigh. In addition, an erythematous macule measuring approximately 10 cm in diameter around the nodule was seen (Figure 1A). Dermoscopy of the nodule revealed scattered linear telangiectasias in the center, whitish-red areas, a rainbow pattern surrounding the lesion, and scales (Figure 1B). Histopathological examination showed a tumor with a nodular growth pattern in the dermis composed of cells with a high nucleus-to-cytoplasm ratio, round-oval nuclei, and finely dispersed chromatin. The neoplastic cells exhibited positivity for cytokeratin-20 and neuroendocrine tumor markers. Merkel cell carcinoma (MCC) was diagnosed and was completely excised, with negative regional lymph nodes. Three months later, a biopsy of a mass detected on the right lumbar region was reported

as renal cell carcinoma, leading to nephrectomy. The patient is regularly monitored, and no recurrence or new lesion has been detected.

Teaching Point

Although the rainbow pattern on dermoscopy is primarily associated with Kaposi sarcoma, it has also been reported in lesions such as pyogenic granuloma, strawberry hemangioma, malignant melanoma, angiokeratoma, basal cell carcinoma, dermatofibroma, and blue nevus [1]. However, a few MCC cases have only previously described the rainbow pattern [2,3]. Merkel cell carcinoma is a rare carcinoma with a poor prognosis due to its high, rapid metastasis potential. Therefore, MCC should also be considered when encountering a rapidly growing purplish solitary mass with a rainbow pattern on dermoscopy.

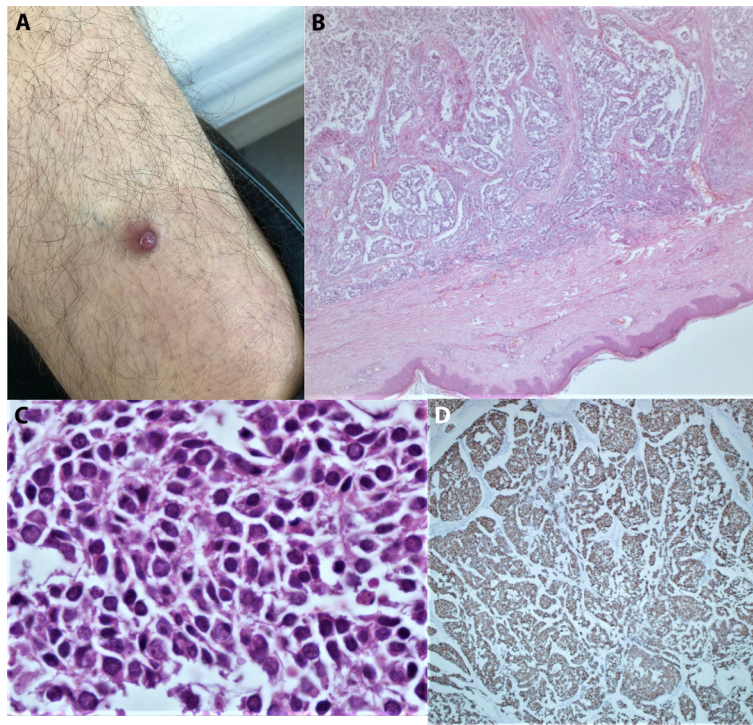


Figure 1. A) Firm purplish nodule on the right thigh surrounded by an erythematous macule. B) The dermoscopic view: multiple telangiectatic vessels, some of which branched, and the rainbow pattern surrounding the purple nodule. C) The tumor localized in the dermis is composed of neuroendocrine cells (HEX100). D) Positive staining with neuroendocrine markers in Merkel cell carcinoma (SynaptophysinX200).

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