Internal Medicine
The Japanese Society of Internal Medicine
doi: 10.2169/internalmedicine.8105-21
Intern Med 61: 1463-1465, 2022
http://internmed.jp

【 PICTURES IN CLINICAL MEDICINE 】

Polyomavirus-associated Primary Gastric Merkel Cell Carcinoma

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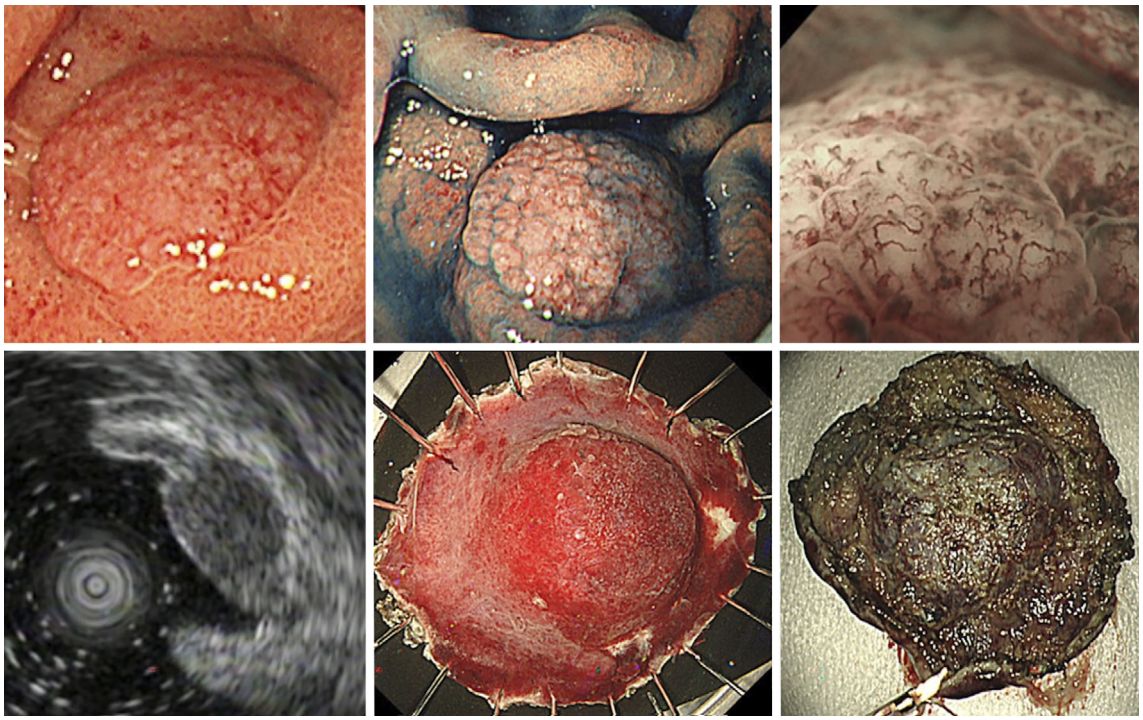
Key words: Merkel cell carcinoma, gastric neuroendocrine carcinoma, endoscopic submucosal dissection

(Intern Med 61: 1463-1465, 2022)
(DOI: 10.2169/internalmedicine.8105-21)



Picture 1.

Merkel cell carcinoma (MCC) is a highly aggressive cutaneous neuroendocrine carcinoma associated with a novel polyomavirus (1). Reports of MCC in the stomach and its endoscopic features are few (2). The MCC tumor has not been proven to originate only in the epithelium (1). We encountered a case of primary gastric MCC in an 89-year-old man. Esophagogastroduodenoscopy (EGD) showed an elevated, 10-mm tumor on the greater curvature of the upper stomach with a quilt-like surface pattern (Picture 1). Magnifying endoscopy with narrow-band imaging showed the absence of a pit pattern and dense collection of dilated microvasculature of a different caliber. No other lesions were noted on positron emission tomography-computed tomography. Endoscopic ultrasound demonstrated that the tumor was derived from above the submucosal layer. Endoscopic submucosal dissection (ESD) was subsequently performed by dissecting just above the muscle layer using the clip traction method. A histopathological examination revealed that the tumor originated from the submucosal layer with wide mucosal layer invasion, and the vertical margin was positive (Picture 2a, b). Hematoxylin and eosin-stained tissue samples showed uniform round nuclei, a salt-and-pepper chro-

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Received: June 7, 2021; Accepted: August 29, 2021; Advance Publication by J-STAGE: October 12, 2021
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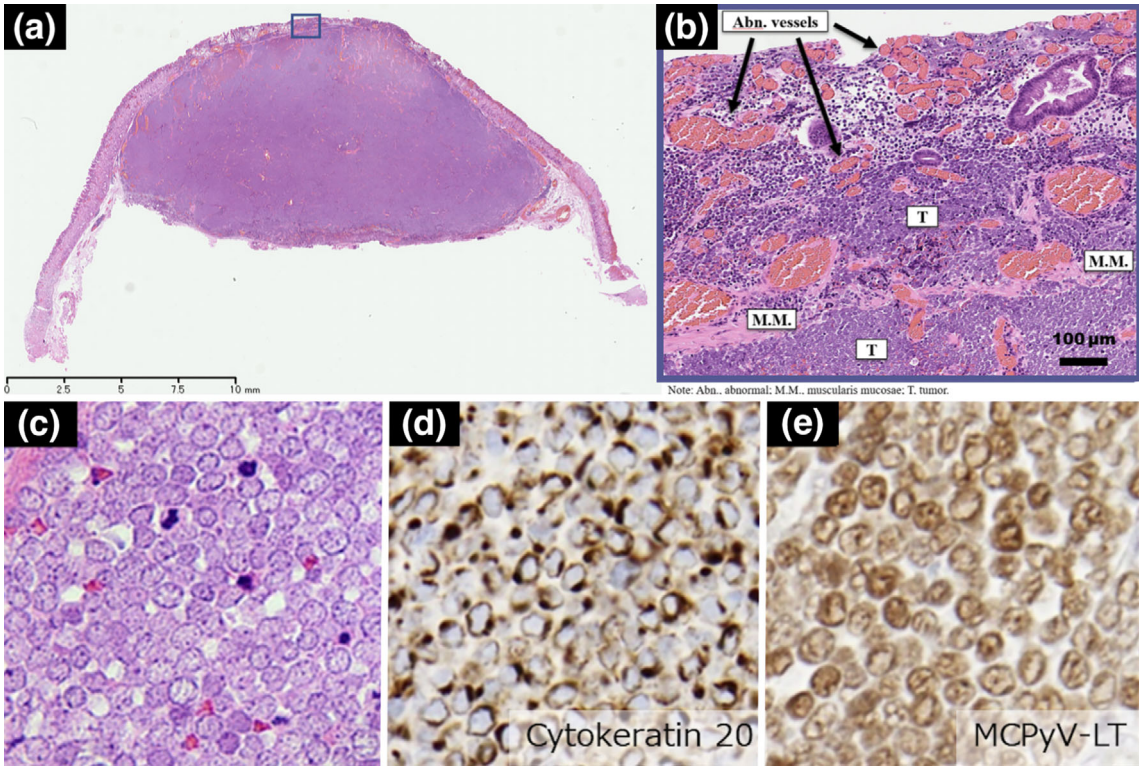
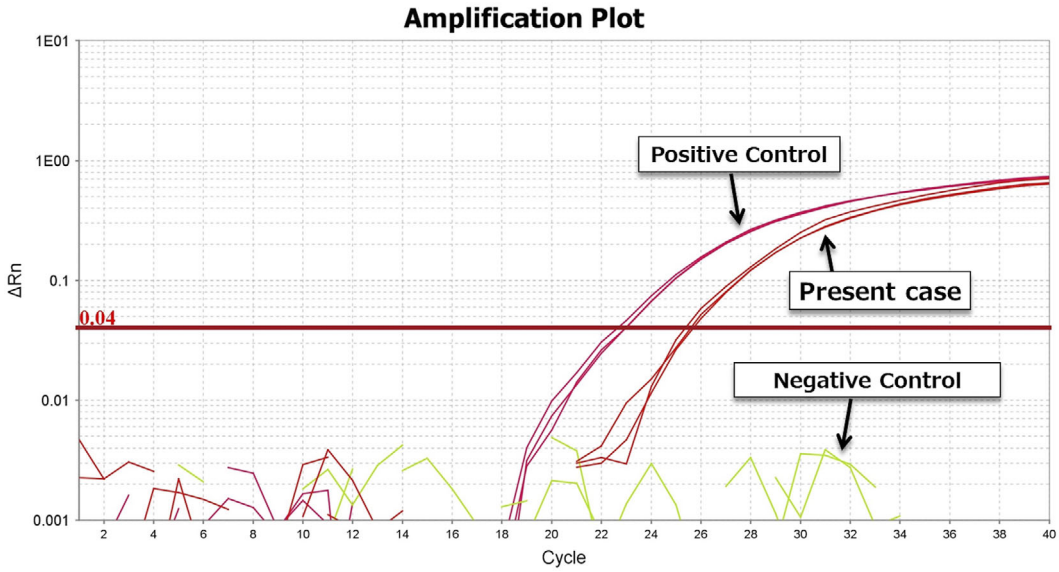


Picture 2.



Picture 3.

matin pattern, and inconspicuous nucleoli (Picture 2c). The neoplastic cells were positive for cytokeratin 20 (perinuclear dot-like pattern) (Picture 2d) and Merkel cell polyomavirus large T antigen (Picture 2e). Molecular genetics confirmed MCC (Picture 3). The patient was recurrence-free at 18 months after ESD followed by EGD and computed tomography without any additional treatment. Gastric MCC is extremely rare, being mostly reported as metastases from cutaneous MCC. The present patient had no skin lesions or history of skin tumors, supporting the diagnosis of primary gastric MCC.

The authors state that they have no Conflict of Interest (COI).

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