

A Case of Merkel Cell Carcinoma Metastasis to the Head and the Body of the Pancreas

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Citation

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Abstract

Merkel cell carcinoma (MCC) is a rare, cutaneous, malignant tumor of neuroendocrine cells. It has a high propensity for local recurrence and regional lymph node metastasis. Thus far, only two cases of MCC with metastasis to the pancreas have been reported in the scientific literature. Here we present the case of a 65-year-old male who presented with abdominal pain of gradually increasing severity over the past two weeks accompanied by jaundice, lower back pain and non-bloody vomiting. He had been diagnosed with MCC of the right gluteal mass 10 months prior with subsequent excision, radiation and chemotherapy. On current admission, computed tomography revealed two masses on the pancreas. After dual sphincteromies of the bile duct and pancreatic duct, and covered wall stent placement, presenting symptoms resolved and continued radiation and chemotherapy prescribed. This case illustrates the possibility of metastasis of MCC to the pancreas even with excision, radiation therapy, and chemotherapy of the primary site.

INTRODUCTION

Merkel cell carcinoma (MCC) is a rare, cutaneous, malignant tumor of neuroendocrine cells. It has a high propensity for local recurrence and regional lymph node metastasis. MCC usually manifests as a rapidly growing, painless, firm, non-tender, intracutaneous nodule that is either flesh-colored or has a bluish-red hue; it can also present as a plaque on sun-exposed skin [1]. The most commonly affected sites are the head and neck (50%), extremities (30%), and trunk and/or genitals (< 10%) with less than 1% of cases occurring on multiple sites [1]. Here we report a case of MCC metastasis to the head and body of the pancreas. To our knowledge, this is only the third case of MCC of the pancreas identified antemortem in the scientific literature and the first case in which multiple carcinomas were present on the pancreas.

CASE REPORT

A 65-year-old male presented with complaints of abdominal pain in the lower and upper right quadrants that had been dull in nature but gradually increasing in severity over the past two weeks. This pain was accompanied by nausea, yellowish discoloration of the urine, diffuse back pain in the lumbar region and non-bloody vomiting over the past 48 hours. He had a past medical history of hypertension, diabetes mellitus and coronary artery disease, as well as

histologically proven MCC (10 months prior to current admission), which was treated by excision of right buttock gluteal mass and dissection of lymph nodes in the right groin. He had been receiving chemotherapy and radiation therapy over the past several months with his most recent radiation session being three days prior to current admission.

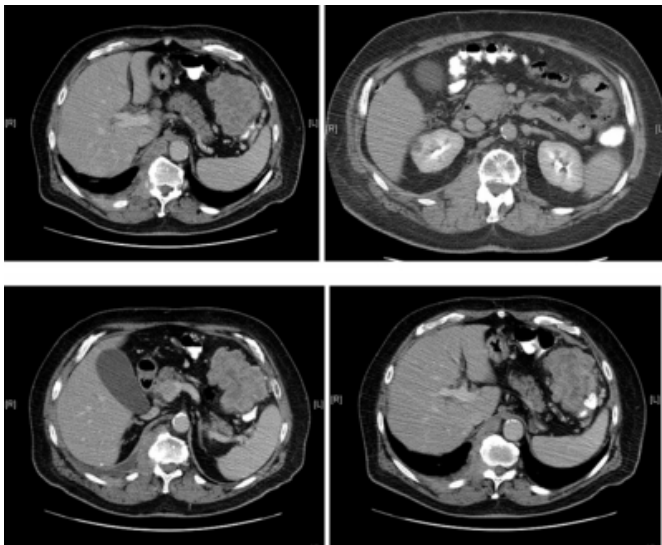
On physical exam, the patient had yellowish sclera. His liver was palpable at the costal margin and there was mild tenderness at the lower and upper right quadrants with no rebound tenderness and no rigidity. No lymph nodes were palpable. There were diffuse papular raised Merkel's lesions over his predominant lower abdomen and extremities with a maximum diameter of 1-2 cm. Abnormal laboratory data included high bilirubin (17.6 mg/dL), alanine (255 units/L), aspartate (133 units/L), lipase (910 units/L) and alkaline phosphatase (282 units/L).

Computed tomography (CT) scan with contrast of the abdomen and pelvis (Figure 1) revealed a mass in the pancreas just anterior to the portal vein measuring maximum of 2.8cm in diameter. There was a second mass present in the pancreas head measuring 2.2cm x 3.5cm. There was a soft tissue density adjacent to the pancreas, suggestive of a peripancreatic lymph node. The common bile duct was dilated, the gallbladder was distended, and the liver and spleen showed no focal lesions. A right paraspinal mass was

consistent with a malignancy. There was also retrocrural lymphadenopathy and some interaortocaval lymph nodes present. Soft tissue densities on the left side and the lower right side of the abdomen in the subcutaneous tissue were suggestive of lymph nodes. Results of an MRI of the lumbar spine were compatible with metastatic disease; there was no evidence of cord compressions.

Figure 1

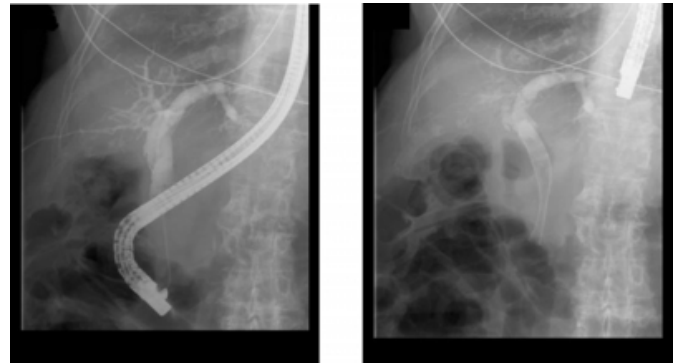
Figure 1: Results of CT with contrast, including evidence of a mass in the pancreas just anterior to the portal vein (2.8cm maximum diameter) and a second mass in the pancreas head (3.5cm maximum diameter)



An endoscopic retrograde cholangiopancreatography exam showed no mucosal abnormalities. The pancreatic duct was somewhat narrowed and sclerotic. There was a significant stricture affecting the distal bile duct and proximal dilation of the biliary tree was appreciated. Dual sphincteromies of the bile duct and pancreatic duct were completed. Covered wall stents were inserted into the distal bile duct and the pancreatic duct. After deploying the stents, copious amount of bile flowed freely (Figure 2). The patient tolerated the procedure well and was discharged home with resolution of all presenting symptoms.

Figure 2

Figure 2. X-Rays during (left) and after (right) endoscopy illustrating effectiveness of stent placement for alleviation of stricture



DISCUSSION

To our knowledge, there have been only two previously described antemortem cases of MCC affecting the pancreas in the scientific literature [2,3]. As with our case, the patients from the previous two cases had presented with a recent history of abdominal pain and jaundice. Both had also had a previous excision of cutaneous MCC, one from the eyelid 6 months prior [3] and one from the hand two years prior [2]. This is similar to our case in which MCC on the buttock had been excised 10 months prior to onset of current symptoms. Taken together, these three cases provide evidence that MCC affecting the pancreas is likely to present as jaundice and abdominal pain in patients who have previously been diagnosed with MCC.

A CT scan of the abdomen in our patient revealed the two masses on the pancreas, one on the head (2.2cm x 3.5cm) and one anterior to the portal vein (2cm diameter). The two cases previously described in the literature also identified MCC of the pancreas using CT scans. Therefore, a CT scan of the abdomen in patients presenting with jaundice and abdominal pain who have a history of cutaneous MCC is indicated in order to rule out MCC metastasis as a cause of the gastrointestinal symptoms.

The two cases previously identified cases of pancreatic MCC were treated by pancreaticoduodenectomy [2] and sphincterotomy [3]. Our patient was treated by completing a sphincterotomy of the pancreatic duct, which the patient tolerated well. At the time of this report, the patient had survived approximately 16 months from the time of original diagnosis. In general, survival rates in patients diagnosed with MCC have been reported to be 88% one-year post-diagnosis, 72% after two years, and 55% after three years [4].

This is the third case of MCC metastasis to the pancreas reported in the scientific literature and the first in which there were multiple tumors on the pancreas. The patient history and presentation was strikingly similar to those of the previous two reports. Taken together, the three cases begin to paint a comprehensive picture of the patient who has MCC metastasis to the pancreas. Clinicians should be aware of the rare possibility of spread of the disease to the pancreas given that the clinical picture has been consistent.

References

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