An unusual submucosal tumor of the cecum presenting a palpable abdominal mass: hepatoid carcinoma

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Dear editors:

Hepatoid carcinoma is a special type of extrahepatic neoplasm presenting features of morphology, immunohistochemistry and biological behavior similar to hepatocellular carcinoma. It was first described in the stomach, which is the most common site and very rarely in the colon (1-2). The prognosis of hepatoid carcinoma is very poor compared with that of common types of adenocarcinoma. A prompt and accurate diagnosis of is important (3). We report here an unusual submucosal tumor of the cecum presenting a palpable abdominal mass, diagnosed as a hepatoid carcinoma by microscopic morphology and immunohistochemical staining.

A 50-year-old woman developed presented with a palpable abdominal mass and intermittent diarrhea for 2 months associated with weakness and weight loss of 7 kilograms. Physical examination showed anemic conjunctiva and a 6-cm palpable, tender mass on right lower quadrant abdominal region. Laboratory data showed hemoglobin of 11.2 g/dl and normal values of tumor markers as carcinoembryonic antigen (CEA), carbohydrate antigen 19-9 and alpha-fetoprotein (AFP). Computed tomography (CT) of abdomen revealed a 8 cm x 7 cm x 7 cm heterogeneous mass of cecum (a). Colonoscopic view showed a submucosal tumor with several mild reddish sessile polyps in the cecum, 130 cm away from anal verge (b).

Fig. 1. CT of abdomen revealed a heterogeneous mass of cecum (a). Colonoscopic view showed a submucosal tumor with several mild reddish sessile polyps in the cecum, 130 cm away from anal verge (b).
erogeneous mass of cecum (Fig. 1a) and no abnormality of liver, gallbladder, spleen and kidney. Colonoscopy disclosed a submucosal tumor with several mild reddish sessile polyps in the cecum (Fig. 1b). Biopsy was done and it showed undifferentiated carcinoma. She underwent the laparotomy of right hemi-colectomy. Histological examination of specimen demonstrated an undifferentiated carcinoma with hepatoid component (Fig. 2). Immunohistochemically, the tumor cells had positivity for cytokeratin 18 (CK18), and negativity for CK7, CK20, AFP and CEA. The diagnosis of hepatoid carcinoma of the cecum was made. The patient was discharged on postoperative day 11. After surgery, she developed liver metastasis 3 months later and lung metastasis 7 months later. Despite aggressive adjuvant therapy, the patient died of disease progression with respiratory failure 8 months later.

Colonic hepatoid carcinoma presented an unusual macroscopic picture, different from adenocarcinoma. Standard biopsy and careful microscopic examination are important. Hepatoid carcinoma is difficulty differentiated from hepatocellular carcinoma by cytology. The absence of a primary identifiable liver disease is crucial evidence for the diagnosis of hepatoid carcinoma. Elevated serum AFP is seen in many, but not all hepatoid carcinomas. Immunochemical staining is applied for differentiation of various tumor origins (4). In clinic, preoperative diagnosis of hepatoid carcinoma is often difficult and surgical resection of colon should be done for malignancy of biopsy, as our case. Generally, hepatoid carcinoma has a poor prognosis with distant metastasis. Early diagnosis and prompt treatment may be benefit for the patient.

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References