

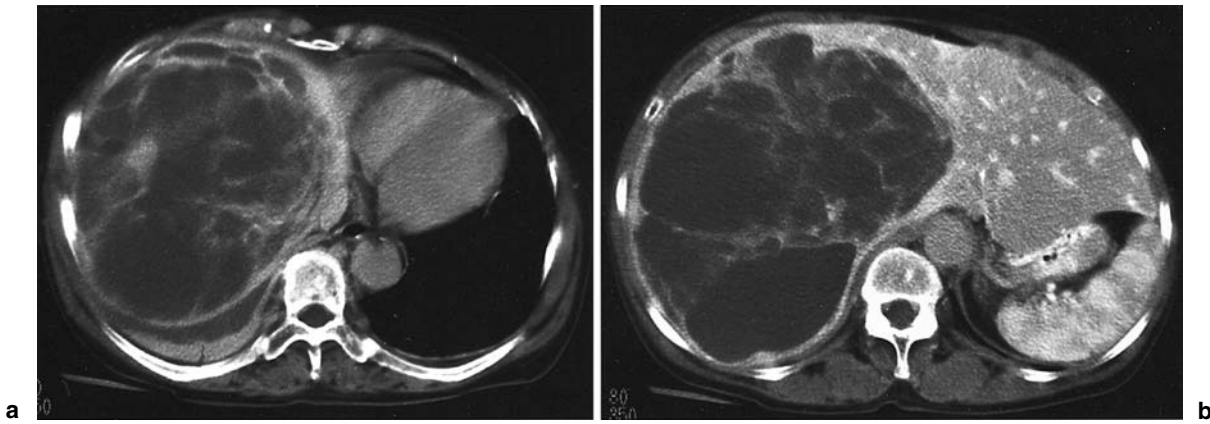
## *Letter to the editor*

# **Hepatocellular adenoma presenting as a giant multicystic tumor of the liver**

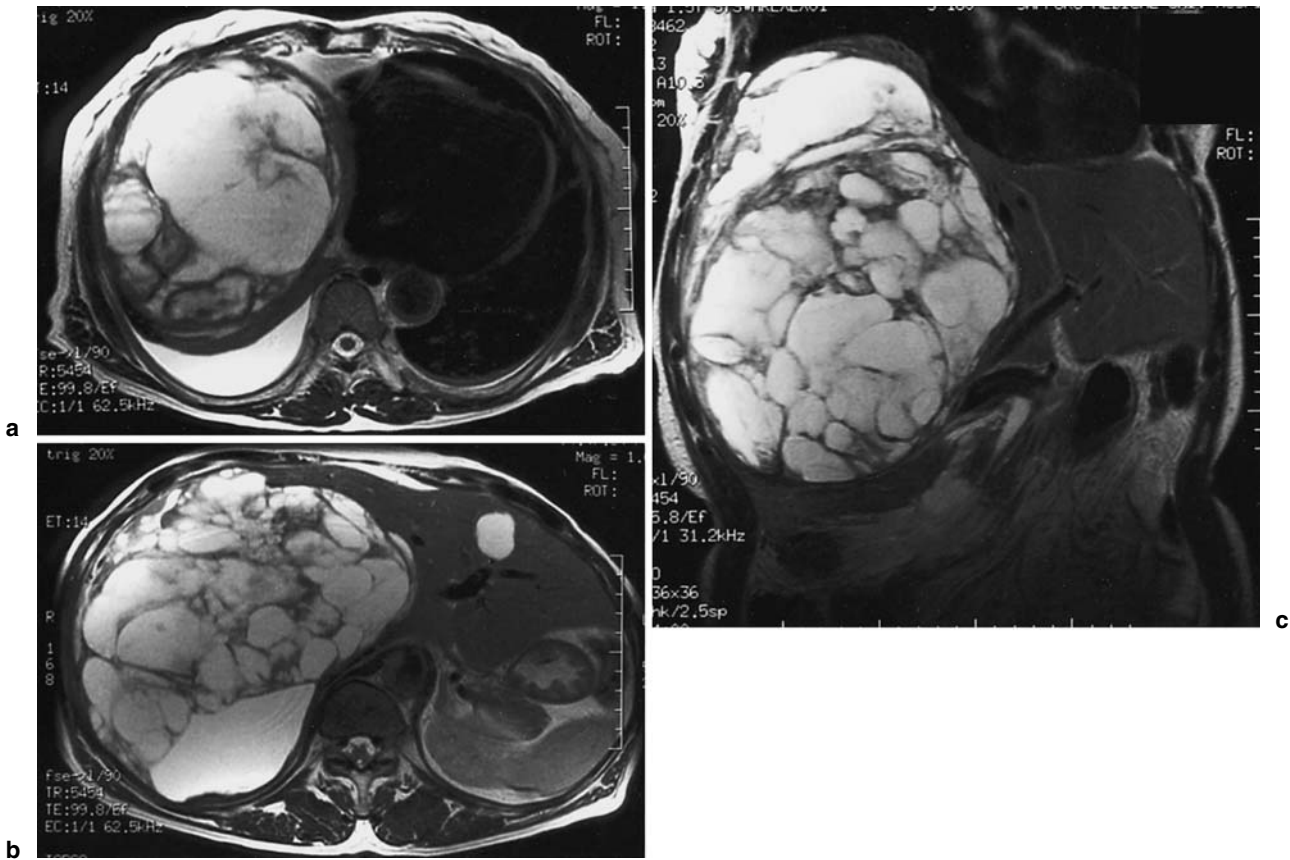
Recently, there has been rapid progress in the reliability of imaging diagnosis, using techniques such as ultrasound, computed tomography (CT), and magnetic resonance imaging (MRI), for the diagnosis of hepatic tumors. However, the appearance of hepatocellular adenomas on CT and MRI is highly variable because of their varied histopathologies, and images of adenoma are sometimes indistinguishable from those of other hepatic tumors.<sup>1,2</sup> Recently, we encountered a case of hepatocellular adenoma with extremely atypical CT and MRI manifestations presenting as a multicystic tumor.

A 70-year-old Japanese woman had complained of abdominal fullness, and a right upper quadrant abdominal mass had been found 2 months before admission to our hospital. On admission, she was in good health, had no significant medical history, and took no medications; of particular note, she had taken no oral contraceptives or steroids. She had no family history of liver tumors. On physical examination, a mass was palpable in the right upper quadrant. CT and MRI revealed a 20-cm multicystic mass with septations in the right lobe of the liver (Figs. 1, 2). There was a small cyst in the left lobe, and slight pleural effusion was shown in the right chest cavity. Laboratory findings, including liver enzymes, were normal, and the serum alpha-fetoprotein and carcinoembryonic antigen levels were normal. Moreover, laboratory and serology data ruled out liver abscess, amebae, and Echinococcus. As this tumor had a multicystic appearance, without a solid region, from the findings of CT and MRI, we diagnosed probable cystadenoma or cystadenocarcinoma. A right hepatic lobectomy was performed. The mass existed in the right

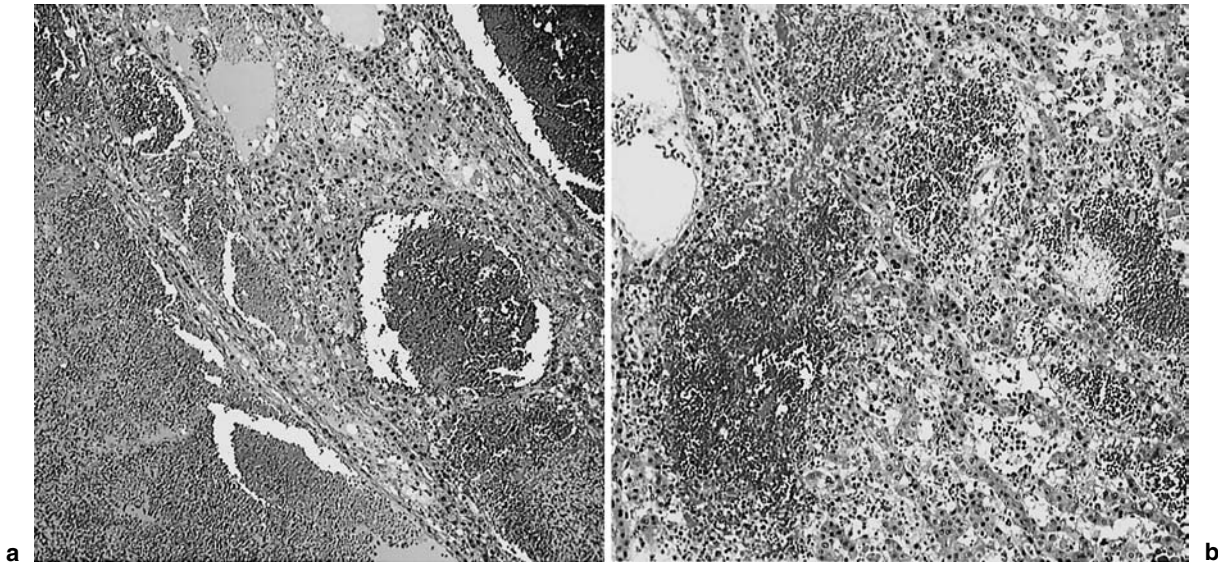
lobe of the liver, and elsewhere the liver appeared noncirrhotic. The tumor weight was 3340g and the maximum dimension in the resected specimens was 21cm. The cut surface was multicystic and the contents of the cysts were serous fluids that were light yellow or bloody. Histological examination showed that the cystic changes were peliotic changes which included components of blood and exudation fluids (Fig. 3). The parenchymal component between the peliotic changes consisted of arranged hepatocyte cords. These cords were histologically diagnosed as hepatocellular adenoma with marked peliotic changes. Hepatocellular adenomas show highly varied appearances on CT and MRI because of their varied histopathologies, such as intratumoral hemorrhage, necrosis, and, occasionally, fatty change or peliosis.<sup>1</sup> In our patient, the images on CT and MRI showed a multicystic appearance without a solid region. We diagnosed cystadenoma or cystadenocarcinoma of the liver. Against our expectations, the histological diagnosis of this tumor was hepatocellular adenoma with marked peliotic changes. The cystic appearance on CT and MRI was actually showing peliotic changes. Although hepatic adenomas show highly varied appearances,<sup>1,2</sup> this multicystic appearance has not been reported. Moreover, hepatocellular adenoma is a rare benign neoplasm and is usually found in women aged between 15 and 45 years who take oral contraceptives.<sup>3</sup> However, this case was in a 70-year-old woman who had taken no oral contraceptives or steroids. From these points of view, this case was considered to be an extremely rare case of hepatocellular adenoma.



**Fig. 1a,b.** Abdominal computed tomographic scans revealed a large multicystic mass with septations, 21 cm in diameter, in the right lobe of the liver



**Fig. 2a-c.** Magnetic resonance imaging (T2) revealed a large multicystic mass with septations, 21 cm in diameter, in the right lobe of the liver. There was a small cyst in the left lobe, and slight pleural effusion was shown in the right chest cavity



**Fig. 3a,b.** Histological examination showed that the cystic changes were peliotic changes which included components of blood and exudation fluids. The parenchymal component between the peliotic changes consisted of arranged hepatocyte cords. These cords were histologically diagnosed as hepatocellular adenoma with marked peliotic changes

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