



가 가 . 2 71 가 , T1WI T2WI , , , , 17 x 14 가 (1). (Fig. 1F). 가 (Fig. 1G). 가 (osteoid) . 가 keratin 71 가 2 가 10 x 12 cm 가 , 가 (Fig. 1A). , 가 , 가 (Fig. 1B). T1WI 가 (Fig. 1C), T2WI (Fig. 1D), (Fig. 1E). Shimada , 가 (Tumor - marker) . 5, 6, 7 가 , , 가 (1). , AFP, CEA, CA19 - 9

1
2

:
 , Matsuo

(2). Honda H

가

가

가

, T2WI

T1WI
 가

가 (5).
 (undifferentiated embryonal sarcoma)

(3). Imazu H

가

(4).

가

가

가

가

6 - 10

, 90%

15

(6).

가

. Matsuo

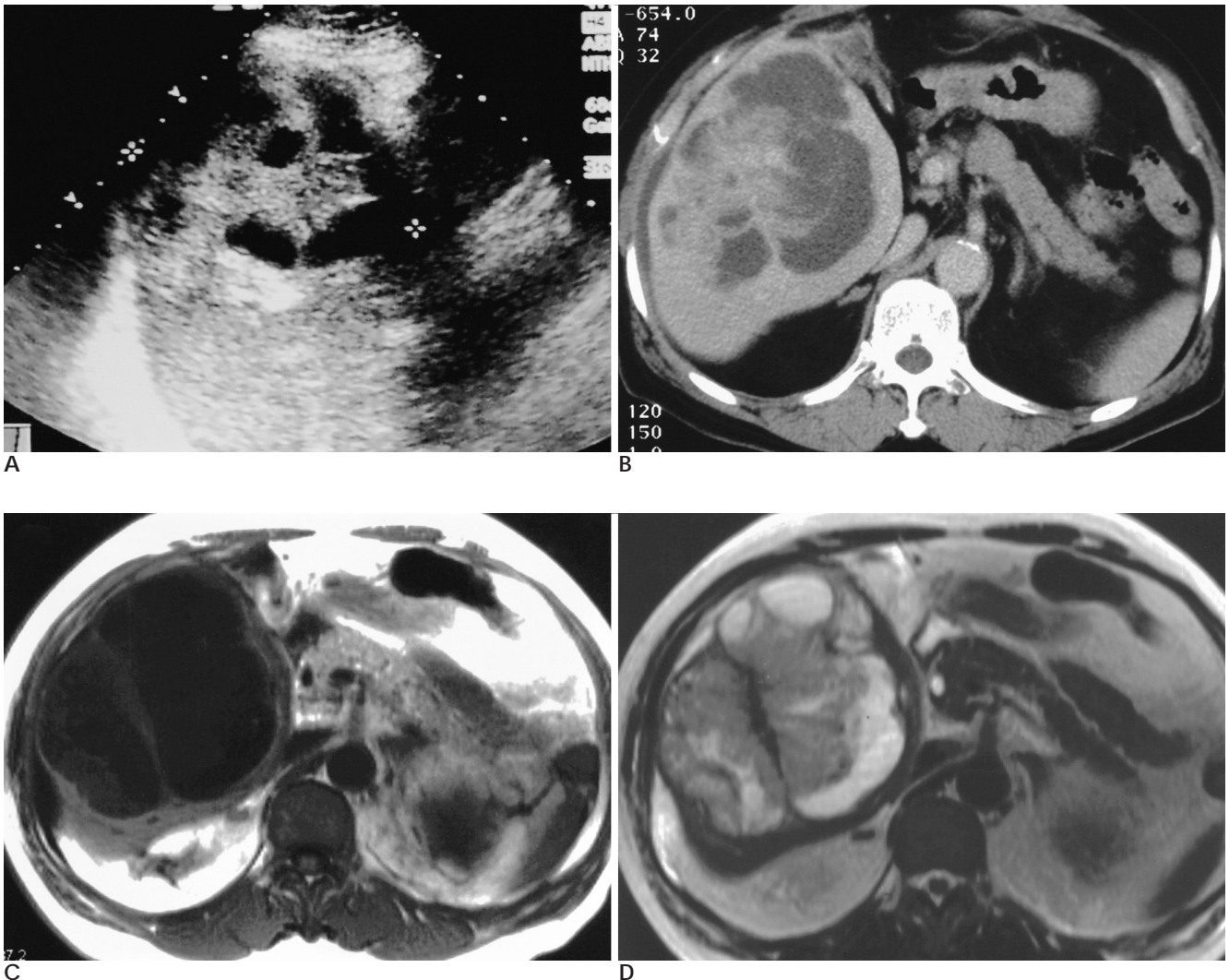
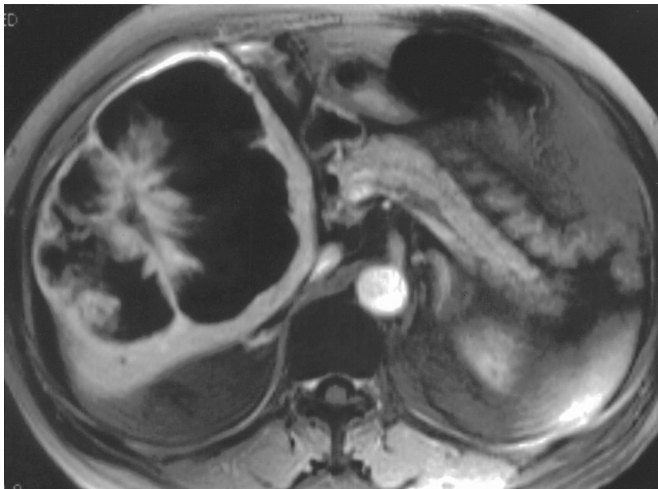
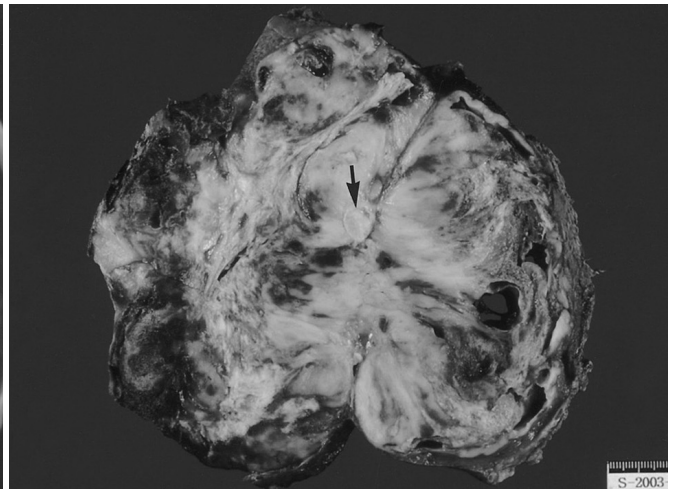


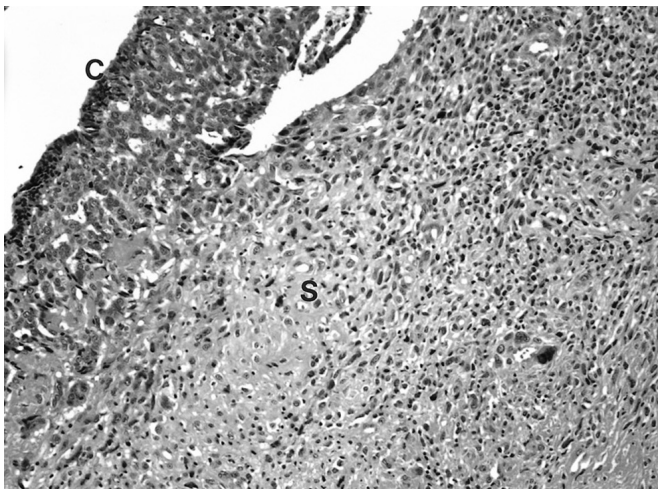
Fig. 1. A. A 71-year-old man with intrahepatic cholangiocarcinoma and sarcomatous change. Ultrasonogram of the upper abdomen reveals a huge hepatic mass containing solid and cystic portions.
 B. Computed tomogram shows a hepatic mass of heterogeneous feature with central area of delayed enhancement.
 C. T1-weighted MR image shows a huge mass of predominantly low signal intensity.
 D. T2-weighted MR image shows portions of high signal intensity.



E



F



G

Fig. 1. E. Contrast enhanced T1 weighted MR image shows that the central portion of the mass is relatively well enhanced. F. Gross specimen of the tumor shows heterogenous nature. Carcinoma nest (arrow), sarcomatous and necrotic areas around it are noted well. G. Photomicrograph shows transitional area from carcinoma-tous element (" C ") to sarcomatous element (" S ") (original magnification, $\times 100$; hematoxylin-eosin staining).

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Intrahepatic Cholangiocarcinoma with Sarcomatous Change: Case Report¹

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Cholangiocarcinomas have several histologic types, but intrahepatic cholangiocarcinoma with sarcomatous change is rare. A 71-year-old man was admitted to our hospital because of fever which had lasted two months. Ultrasonography (US) of the upper abdomen demonstrated a huge hepatic mass with central solid and peripheral cystic portions, and computed tomography (CT) revealed a heterogeneous hepatic mass with a central area in which enhancement was delayed. Magnetic resonance imaging (MRI) disclosed a huge mass of predominantly low signal intensity at T1WI, and peripheral portions of high signal intensity and a central portion of intermediate signal intensity at T2WI. The pathologic diagnosis was cholangiocarcinoma with sarcomatous change.

Index words : Liver, neoplasms

Liver, US

Liver, CT

Liver, MR

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