PostScript

LETTER TO THE EDITOR

An uncommon pattern of cardiac invasion in hepatocellular carcinomaHCC, hepatocellular carcinoma

Hepatocellular carcinoma (HCC), the most common primary malignant tumour of the liver, is a highly vascular neoplasm usually arising in a cirrhotic liver. In addition to the diagnosis of primary lesion, an assessment for extrahepatic metastasis is needed. Herein, an extremely uncommon pattern of heart invasion in a patient with advanced HCC is described.

A 75-year-old man was admitted to the Hospital of Zumarraga, Zumarraga, Spain, for moderate abdominal pain, asthenia and weight loss. He denied having dyspnoea, orthopnoea, cough, palpitation or peripheral oedemas. Three years earlier, HCC had been diagnosed in the eighth segment, and the patient had received several courses of transcatheter arterial chemoembolisation. An objective examination showed hepatosplenomegaly and ascites, with no signs of cardiac failure. Temperature, blood pressure and cardiac frequency were normal. Laboratory data showed raised serum levels of aspartate transaminase and αfetoprotein. Electrocardiogram and chest *x* ray showed no abnormalities. A total-body computed tomography scan highlighted diffuse infiltration of hepatic lobes (fig 1), mesenteric nodules with ascites (suggestive of carcinomatosis), multiple lymphadenopathy in celiac trunk and portocava veins and a mass in anterior pericardium (fig 2) with no pericardial or pleural effusion. Peritoneal fluid showed an exudate but no malignant cells. The cava and suprahepatic veins, and right atrium did not show evidence of tumoral invasion. The patient died 2 weeks later from acute renal failure. An autopsy was not authorised.

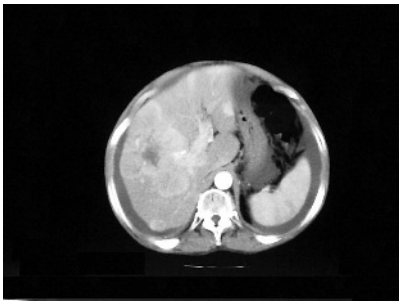

Figure 1 Computed tomography scan of the abdomen showing diffuse infiltration of both hepatic lobes.

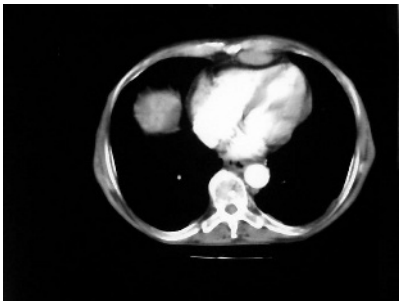

Figure 2 Computed tomography scan of the chest showing a rounded, oval-shaped mass in the anterior pericardium.

Practically all malignant secondary neoplasms may affect the heart. Metastatic spreading to the heart has been identified in about one fifth of all patients who have metastatic cancer. The pericardium may be invaded, mainly by carcinoma of the lung followed by breast carcinoma, lymphoma and leukaemia. Rare metastatic neoplasms of the pericardium include carcinomas of the digestive tract, such as colon, oesophagus, stomach and others.[1] HCC spreads most often to the lungs, peritoneum, adrenal glands and bones. The incidence of cardiac metastasis of HCC has been reported in up to 4.1% of patients.[2] Classically, several routes of pericardiac involvement in malignancy have been described,[1] such as haematogenous route, by direct extension from intrathoracic cancer, by retrograde lymphatic embolisation from the mediastinal lymph nodes, by continuous spreading through the diaphragm with infiltration of the left atrium and by tumour thrombus in the venous system. The mechanism of cardiac involvement in HCC is related to the marked propensity of this tumour for vascular invasion and extension, such as tumour thrombus including the hepatic vein and the inferior vena cava, thus easily reaching the right cardiac cavities.[2 3] Pericardiac involvement through direct invasion of the anterior mediastinum is another rare mechanism that has been reported in a few patients with advanced HCC after several courses of transcatheter arterial chemoembolisation.[4] This patient represents an extremely unusual pattern of cardiac involvement from HCC because of intravascular tumour thrombus or growth; transdiaphragmatic infiltration or direct extension from mediastinum or lymph nodes was absent. Thus, the route of isolated pericardial metastasis was probably haematogenous.

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Competing interests: None declared.

References

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CORRECTION

doi: 10.1136/jcp.2004.019323.corr2

We regret that there was an error in the correction that was published in the last issue. Reference 9 in the article by Chatterjee JS, Youssef AHK, Brown RM, *et al*. Congenital nodular multiple glomangioma: a case report. *J Clin Pathol* 2005;**58**:102–10 should read as follows: Öztekin HH. Popliteal glomangioma mimicking Baker's cyst in a 9-year-old child: an unusual location of a glomus tumor. *Arthroscopy* 2003;**19**:e67–e71.

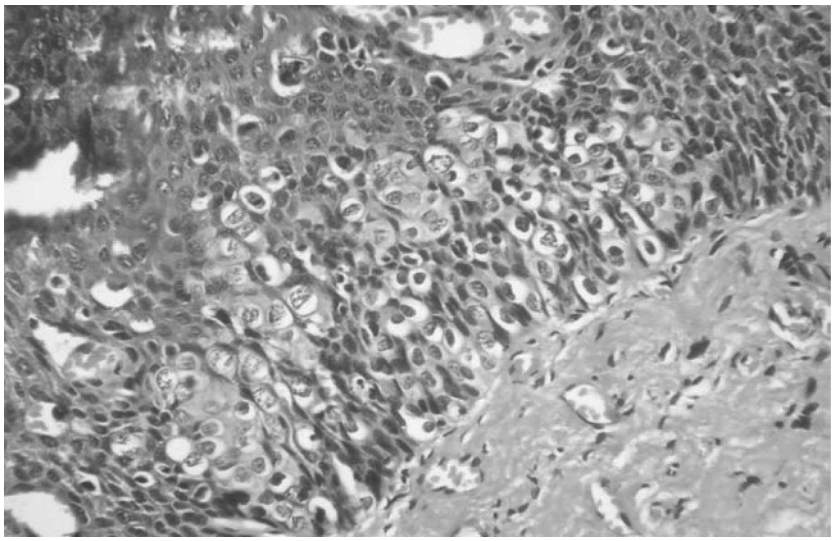

Figure 3 High-power photomicrograph showing Paget's cells present in small groups and nests. Paget's cells show round to oval nucleus with granular to vesicular chromatin and abundant pale to clear cytoplasm. Adjoining vulvar epithelium shows vulval intraepithelial neoplasia III changes.

CALENDAR OF EVENTS

Diagnostic histopathology of breast disease

14–17 May 2007, Hammersmith Hospital (Imperial College), London.

A 4-day course on the Hammersmith Campus designed for pathologists at Consultant and Senior Trainee level and suitable for the final examination for MRCPath. The course will provide a comprehensive coverage of the histopathology of breast disease, with special emphasis on areas which pose diagnostic difficulties. The course is based historically on the extensive referral collection of Professor JG Azzopardi, to which has been added new cases from Charing Cross, Nottingham City and Addenbrooke's Hospitals. The course will be slanted towards practical diagnostic pathology with a specific session dealing with problems encountered in core biopsies and a special workshop dealing with the interpretation of HER2 immunostaining. The participants will be given ample time to study histological preparations, followed by illustrated discussions of the cases. In addition, there will be several daily talks on specific topics, given by eminent breast pathologists and followed by discussions. The topics will include: new issues in the interpretation of breast biopsies, breast immunohistochemistry, problematic breast lesions, dealing with the gross specimen, fibro-epithelial, spindle cell and papillary lesions, proliferative lesions/carcinoma in-situ, sentinel lymph node biopsy and the impact of molecular genetics on diagnostic breast pathology. The faculty will include Anthony Douglas-Jones, Ian Ellis, Bharat Jassani, Andrew Lee, Sarah Pinder, Jorge Reis-Filho and Sami Shousha.

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CORRECTION

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There was an error in the December issue of the journal (Anton E, Larrañaga O. An uncommon pattern of cardiac invasion in hepatocellular carcinoma HCC, hepatocellular carcinoma. *J Clin Pathol* 2006;**59**:1337. The correct name of the second author is Astiazaran A.