Hepatocellular Carcinoma with Invasion into the Right Atrium: A Case Report

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Hepatocellular carcinoma (HCC) has a great tendency toward venous invasion; however, metastatic HCC invasion into the right atrial cavity was rarely reported. We herein report a rare case of right atrial invasion from hepatocellular carcinoma in a 50-year-old man with history of alcoholic liver cirrhosis, and later diagnosed as hepatocellular carcinoma. Because of the patient did not wish any invasive therapy, he received compassionate thalidomide therapy only. Two weeks later, he died of circulatory collapse. Cardiac involvement of HCC should be considered when a patient with a history of chronic hepatic disease presents with unexplained cardiac symptoms or refractive leg edema. Keeping a low threshold for cardiac image surveillance is suggested.

Key words: hepatocellular carcinoma, metastasis, heart

Introduction

Hepatocellular carcinoma (HCC) has a tendency to spread into the venous system, but intracavitary cardiac extension or metastasis of hepatocellular carcinoma is an uncommon form of cardiac malignancy (1-4). HCC patients with cardiac involvement is rare and usually associated with extremely poor outcome (5,6). These patients often exhibits symptoms of heart failure owing to flow obstruction or thromboembolism upon diagnosis (6).

Case Report

A 50-year-old gentleman presented to the emergency department with jaundice, bilateral lower leg edema, and exertional dyspnea of one week’s duration. He had a history of alcoholic liver cirrhosis but denied any known cardiac or pulmonary disease. His blood pressure was 110/70 mmHg, heart rate 100 beats/minute, body temperature 37°C. Although pulse oximetry showed 96% oxygen saturation on room air, supplemental oxygen at 4 L/min via nasal cannula was given. On physical examination, the patient had acute ill looking, dyspnea, icterus sclerae and a distended abdomen with engorged superficial veins was noted. A gallop rhythm and grade III/VI holosystolic murmur were detected on auscultation. Significant biochemistry results were as follows: aspartate aminotransferase (AST) 109 IU/L, alanine transaminase (ALT) 152 IU/L, and total bilirubin 3.5 mg/dL. Coagulation profile was within normal limit. A 12-lead electrocardiogram and cardiac...