

中文題目：肝細胞癌合併心臟侵犯

英文題目：Hepatocellular carcinoma with cardiac involvement

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## **Introduction**

Hepatocellular carcinoma (HCC) is the second leading cause of cancer-related death in Taiwan and worldwide. Locations of extrahepatic HCC involvement common occur in lung, lymph nodes and bone but very rare in heart. In this report we will present a 67 year old man with hepatoma due to chronic hepatitis B complicated with left atrial involvement.

## **Case presentation**

A 67 years-old male was admitted to our hospital due to sudden onset of right upper abdominal pain. This patient had history of chronic hepatitis B but he didn't receive following abdominal sonography and blood test. However, he felt progressive dyspnea and general edema since three months ago. In addition, fatigue, poor appetite were also noted. Due to sudden onset of dyspnea and severe right upper abdominal pain, he was sent our emergency room. At our ER, his vital signs are unstable as hypotension, tachycardia and tachypnea (BP-85/46mmHg, T.P.R-36.5°C, 124/min, 26/min). Physical examination revealed bilateral jugular vein engorgement, abdominal distention, diffuse tenderness, muscle guarding and general edema. Laboratory data showed severe anemia (Hb-6.5g/dl), elevation of total bilirubin level (4.6mg/dl), INR (1.68) and AFP (65.29ng/ml). Due to desaturation, intubation was done. Abdominal computerized tomography was arranged and showed (1) a hypovascular hepatoma, 6x8.3 cm in size in the segment 8 and part of segment 5 with massive ascites, highly suspected HCC with rupture, (2) tumor thrombi within the left atrium, highly suspected metastasis (3) multiple filling defect within the superior and inferior branches of bilateral pulmonary arteries and veins, predominance in right side, suspected pulmonary metastatic embolism. Transcatheter arterial chemoembolization was done for hemostasis and he was admitted to our intensive care unit after the procedure. During admission, unstable hemodynamic status was still noted even after correction of anemia. Cardiovascular surgeon was consulted and surgical removal of left atrial tumor thrombi was suggested but the patient's family refused and would like palliative treatment. Then Sorafenib was used. However, sudden onset of pulseless electrical activity occurred and the patient expired on hospital day 6.

## Discussion

Cardiac involvement of HCC is rare with the prevalence about 2% but it is a poor prognostic factor and the mean survival period of these patients was only 1~4 months. Right atrium is the most common involved area and left heart metastasis is extremely rare. Symptoms of heart failure such as general edema, dyspnea on exertion and fatigue often occur and the risk for sudden death caused by cardiopulmonary collapse is as high as 25% in case series. There are no standard treatment methods of HCC with cardiac involvement but some case reports suggested surgical removal of thrombi in selected patients with preserved liver function can prolong survival and improve quality of life. Target therapy of HCC with Sorafenib may be an alternative treatment for patients with relatively poor liver function.

## Conclusion

HCC with cardiac involvement is rare but a poor prognostic factor. Symptoms of heart failure and even sudden death may occur. No standard treatment is proposed for this condition, and surgical treatment and target therapy for HCC may be considered in selected patients.

