

# **Emergent transarterial embolization for spontaneous rupture of hepatocellular carcinoma: single-center experience**

Shu-Hsiang Wang<sup>1</sup>, Yung-Fang Chen<sup>1,2</sup>, Hsein-Jar Chiang<sup>1</sup>

Department of Radiology<sup>1</sup>, China Medical University Hospital

School of Chinese Medicine<sup>2</sup>, College of Chinese Medicine, China Medical University

## **Objective**

Liver cancer is a frequently diagnosed cancer worldwide (the fifth in men and the seventh in women). More than half a million hepatocellular carcinoma (HCC) cases are diagnosed worldwide every year. Hepatocellular carcinoma (HCC) is the second leading cause of cancer-related death in Taiwan. Spontaneous rupture of hepatocellular carcinoma is a life-threatening complication with varied incidence and high mortality. The aim of this study was to assess the clinical features and survival rate in patients with a spontaneous ruptured hepatocellular carcinoma and treated with transarterial embolization.

## **Materials and methods**

A 3-year retrospective study was performed on all 38 patients with spontaneous rupture of hepatocellular carcinoma and emergent transarterial embolization who presented from 2010 to 2012. The clinical features, laboratory and image findings of groups with different survival periods were compared.

## **Results**

The group who died (n=17) presented worse clinical condition and elder status than the group who survived (n=21). The group who died had a poorer Child-Pugh class, lower hemoglobin and serum albumin levels, higher demand for blood transfusion, greater prevalence of portal vein thrombosis, and higher serum total bilirubin and aspartate aminotransferase levels. Successful hemostasis with transcatheter arterial embolization was achieved in 87% of patients (30-day mortality rate, 45%). Two of the group who survived received second-stage hepatic resection.

## **Conclusion**

Emergency transcatheter arterial embolization is a minimally invasive and effective treatment for hemostasis of ruptured hepatocellular carcinoma. However, patients with poorer clinical condition and elder status are at high risk of death.