

A case of oldest-old patient with hepatocellular carcinoma responding to heavy (carbon) ion-beam therapy, but causing intrahepatic and lung metastases in a short period

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Abstract

Recently, the diagnosis and treatment for hepatocellular carcinoma (HCC) have improved, and therapeutic modalities have been increasing. Moreover, the age of patients with HCC becomes older as the treatment efficacy of chronic hepatitis or liver cirrhosis improves. Thus personalized medicine should be considered for patients with HCC. We describe an oldest-old case of HCC treated by heavy (carbon) ion-beam radiation therapy, but the patient developed intrahepatic and lung metastases. An 85-year-old woman was diagnosed as having an HCC that was detected on computed tomography and ultrasonography following the elevation of tumor markers. She has been suffering from chronic hepatitis B, and hepatitis B virus probably caused HCC. She opted to receive heavy ion beam therapy (carbon) for HCC, but not an operation or TACE (transcatheter arterial chemoembolization) because she is an oldest-old patient. The tumor size was too large (its diameter 6 cm) to treat by radical local therapy, such as radio frequency ablation; she had a good performance status; and she wished to receive heavy ion-beam therapy. This therapy for HCC has been recently developed, and its efficacy has been reported, but the option has not been established in the algorithm of treatment for HCC, which is advocated by the Japan Society of Hepatology. Unfortunately, the patient developed intrahepatic and lung metastases three months after the radiation therapy, although the original HCC lesion was decreased. Because a relatively large HCC is very likely to cause metastasis, we should be careful about recurrence even after radical therapy.

Key words : hepatocellular carcinoma, heavy ion beam therapy, old age, hepatitis B, metastasis