A case of an intra-atrial tumor thrombus from hepatocellular carcinoma (HCC), first indicated by $^{67}$Ga-citrate scintigraphy

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We encountered a very rare case of an intra-atrial tumor thrombus from hepatocellular carcinoma (HCC). Conventional XCT and US gave evidence of HCC. In nuclear medicine studies performed incidentally, the first study with $^{99m}$Tc-phytate liver scintigraphy showed 2 SOLs and evidence of chronic liver disease, and the second study with $^{67}$Ga-citrate scintigraphy demonstrated 2 hot lesions within the liver parenchyma, and also another unexpected hot area just above the left lobe of the liver, seemingly beyond the diaphragm. When echocardiography was performed, in addition to ECG, because the patient began to complain of dyspnea, an oblong mass lesion was detected within the right atrium. Reexamination with XCT and angiography clearly proved the existence of an intra-atrial tumor thrombus. These results indicate the need for routine examination by echocardiography for HCC patients complaining of dyspnea.

Key words: hepatocellular carcinoma (HCC), an intra-atrial tumor thrombus, $^{67}$Ga-citrate scintigraphy