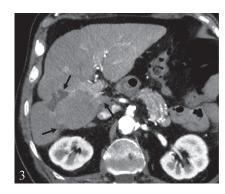
## Spontaneous Regression of Hepatocellular Carcinoma

Romain L'Huillier<sup>1,2,3,4</sup>, Laurent Milot<sup>1,2,3,4</sup>, Jérôme Dumortier<sup>3,4,5</sup>

1) Department of Diagnostic and Interventional Radiology, Hôpital Edouard Herriot, Hospices Civils de Lyon, Lyon; 2) LabTAU - INSERM U1032, Lyon; 3) Lyon Hepatology Institute (Everest), Hospices Civils de Lyon, Lyon; 4) University of Lyon, Lyon; 5) Department of Hepatogastroenterology, Hôpital Edouard Herriot, Hospices Civils de Lyon, University of Lyon, Lyon, France







In June 2019, a 70-year-old man, followed for alcohol-related cirrhosis, was diagnosed with multifocal hepatocellular carcinoma (HCC), in segment I of 33 mm and in segment VII of 19mm (with arrowheads) (Fig 1), confirmed by biopsies. Histological examination revealed two well-differentiated HCCs. He underwent microwave ablation (MWA) of the two HCCs, with controlled disease until October 2021, when two local nodular recurrences measuring 12 mm and 14 mm (Fig 2, white arrowheads) and a large hypervascular lesion (98 mm) in the right liver (orange arrowhead) appeared. A biopsy of this new lesion confirmed a moderately differentiated HCC. These recurrences and the new HCC were not treatable with transarterial chemoembolisation (TACE) because of the inability to catheterize of the hepatic artery (severe stenosis of the celiac trunk) and the patient refused systemic treatment.

The patient was lost of follow-up. In November 2023, CT disclosed tumoral regression of HCCs (Fig 3, black arrows), in the absence of any antitumoral treatment.

Spontaneous regression of HCC is obviously possible, although very rare (approximately 30 reported cases in the literature), representing an incidence rate of one out of every

60,000-100,000 cases. Our case is original since the initial diagnosis of HCC was confirmed by a biopsy of the tumors, the size of the tumors was large, and the regression was almost complete. The cause of spontaneous regression is not known. Two major explanations for spontaneous regression have been proposed in the literature: tumor hypoxia and immunologic reactions [1]. There was no argument in our case for a spontaneous regression from autoinfarction [2].

Corresponding author: L'Huillier Romain, romain.lhuillier@chu-lyon.fr

Conflicts of interest: None to declare.

## **REFERENCES**

- Sakamaki A, Kamimura K, Abe S, et al. Spontaneous regression of hepatocellular carcinoma: A mini-review. World J Gastroenterol 2017;23:3797-3804. doi:10.3748/wjg.v23.i21.3797
- Singh K. Spontaneous Regression of Hepatocellular Carcinoma From Autoinfarction and Implications on Liver Transplantation. ACG Case Rep J 2022;9:e00825. doi:10.14309/crj.0000000000000825