A 76-year-old man with hepatitis B-associated hepatocellular carcinoma (HCC) had multiple episodes of HCC recurrence despite repeated transcatheter arterial chemoembolization (TACE). Thus, drug-eluting bead TACE (DEB-TACE) was performed for a tumor measuring 4 cm in diameter (Picture A). Digital-subtraction angiography after the procedure showed stasis in the feeding artery and localized pooling of the contrast medium within the tumor, namely, the “vascular lake phenomenon (VLP)” (arrowheads, Picture B). This vascular lake disappeared after embolization.

DEB-TACE is a chemoembolization technique using drug-eluting beads, which ensure prolonged and sustained intratumoral drug release. The technique is associated with a higher response rate and overall survival in comparison with conventional TACE (1). Although its cause remains unclear, the VLP occurs during DEB-TACE in large encapsulated tumors; the incidence in treated nodules is 12-26% (2, 3). The VLP is reported to be associated with a good local and overall response to chemoembolization (2, 3). Given the recent introduction and growing use of DEB-TACE in Japan, physicians need to be aware of the VLP.

The authors state that they have no Conflict of Interest (COI).

References