

Preablative Embolization for Solitary HCC

BY BRIAN S. GELLER, MD, AND HUGH DAVIS, MD

A 79-year-old man with a history of a solitary hepatocellular carcinoma (HCC) in segment 6 presented to the interventional radiology department for hepatic angiography and preablative embolization (Figure 1A).

After using standard techniques to access the right common femoral artery, a 5-F (1.67-mm) sheath was placed. Subsequently, a selective 4-F (1.33-mm) reverse-curve catheter and a hydrophilic guidewire were used to cannulate the celiac artery. There was difficulty advancing the 4-F (1.33-mm) catheter over the wire and into the common hepatic artery, so it was decided to park the selective catheter at the celiac artery origin and use a microcatheter from there. A 0.027-inch (0.69-mm) Renegade HI-FLO™ Microcatheter and a Fathom®-16 Steerable Guidewire were used to cannulate the right hepatic artery (Figure 1B). The angiogram (contrast injector set for flow rate of 4 mL/s for total volume of 8 mL at pressure of 800 psi [5,516 kPa]) showed the tumor, but there were other areas in question. The microcatheter was exchanged for a 0.027-inch (0.69-mm) Direxion™ Torqueable Microcatheter, and a repeat angiogram (contrast injector set for flow rate of 5.2 mL/s for a total volume of 10 mL at pressure of 1,200 psi [8,274 kPa]) showed innumerable smaller tumors as well (Figure 1C). An intraoperative decision was made to forego embolization and administer macroaggregated albumin to prepare for yttrium-90 treatment.

DISCUSSION

The higher flow rates and pounds per square inch that the Direxion™ Microcatheter provides completely changed

this patient's management. Had he gone on to ablation, only one of his tumors would have been addressed. By changing his treatment to yttrium-90, all of his tumors were treated, and most had a near-complete treatment response (Figure 1D). ■

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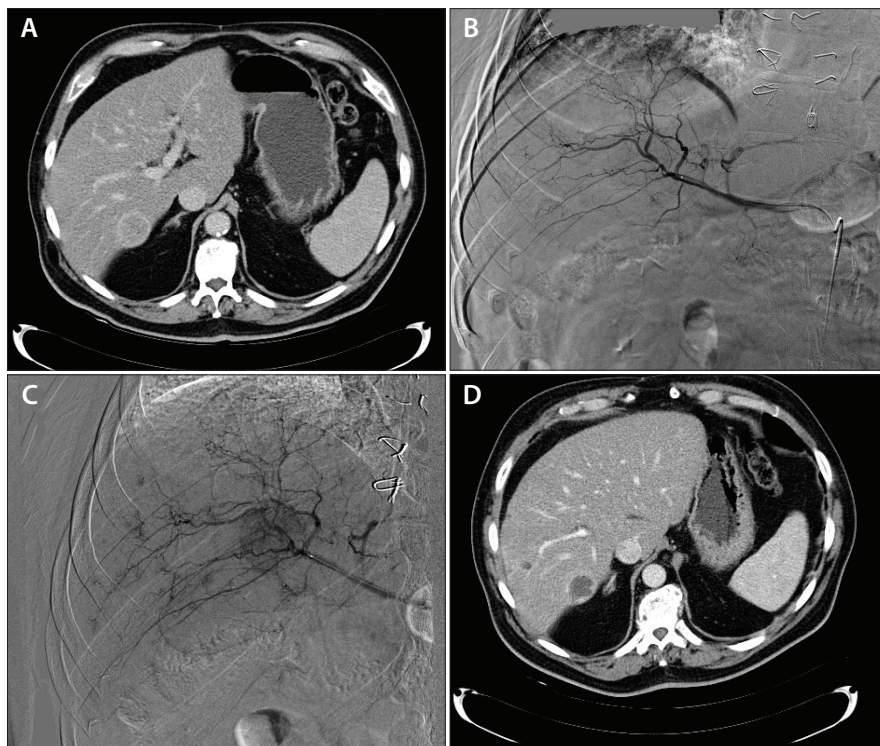


Figure 1. The HCC in segment 6 (A). Imaging obtained with the Renegade HI-FLO™ system (B). Imaging obtained with the 0.027-inch (0.69-mm) Direxion™ HI-FLO™ Microcatheter (C). Follow-up CT scan (D).

Results from case studies are not necessarily predictive of results in other cases. Results in other cases may vary.