A 72-year-old woman with Child–Pugh B cirrhosis was hospitalized in our department for transarterial chemoembolization (TACE) for the recurrence of hepatocellular carcinoma with biliary invasion. She had undergone radiofrequency ablation (RFA) therapy 1 year earlier. Contrast-enhanced computed tomography (CT) showed a 15-mm hypervascular tumor in the common hepatic duct adjacent to the area previously treated with RFA (● Fig. 1).

Subsequent contrast-enhanced ultrasonography with Sonazoid showed a hypervascular pedunculated tumor in the upper extrahepatic bile duct (● Fig. 2).

On admission, the patient was asymptomatic with normal serum bilirubin and biliary enzyme levels. In the morning when TACE was scheduled, however, she developed epigastralgia and vomiting, with elevated serum bilirubin and biliary enzyme levels. CT was performed immediately; the tumor in the common hepatic duct had disappeared, and a lesion with slightly high density (arrow) had appeared in the lower part of the common bile duct instead (● Fig. 3).

We suspected that the biliary tumor thrombus had spontaneously migrated to the lower common bile duct and was causing her symptoms. Emergent endoscopic retrograde cholangiopancreatography showed a 9 × 30-mm filling defect in the distal common bile duct (● Fig. 4).

After endoscopic papillary balloon dilation with a 10-mm balloon, a blackish green tissue was obtained using a retrieval basket catheter (● Fig. 5, ● Video 1).

Histopathological examination revealed hepatocellular carcinoma with extensive necrosis.