The Utility of Double ENBD Catheter Insertion: A Bridging Method for Biliary Decompression

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Background: Multiple drainage may be useful in patients with multisegmental cholangitis, cholangitis with acute cholecystitis, biliary obstruction combined with hilar cholangiocarcinoma (HCCA), or hepatocellular carcinoma (HCC) with bile duct invasion and stricture after bile duct anastomosis. Double endoscopic nasobiliary drainage (ENBD) may also be effective when drainage with single ENBD or endoscopic biliary stent (EBS) is inappropriate. This retrospective study was conducted to evaluate the technical feasibility and clinical efficacy of double ENBD as a new method of draining multisegmental cholangitis or biliary obstruction.

Results: Of the 38 patients who underwent double ENBD, 20 (52.6%) had HCCA, 12 (31.6%) had HCC, 3 (7.9%) had strictures at the anastomotic site following liver transplantation, and 3 (7.9%) had acute cholecystitis combined with cholangitis. Double ENBD was performed to drain contrast agent infused during ERCP in 13 (34.2%) patients, to obtain cholangiography in 7 (18.4%), to relieve multisegmental cholangitis in 5 (13.2%) and to drain hemobilia in 5 (13.2%). Overall, 24 of the 38 (63.2%) patients showed improvements in total bilirubin level, but only 5 of the 12 (41.7%) patients with HCC showed decreased levels. The right anterior and left intrahepatic ducts (42.1%) were the most feasible to drain.

Conclusion: Double ENBD may be useful in patients with multisegmental cholangitis or biliary obstruction.