Successful EUS-guided Hepaticogastrostomy in a Patient with Intrahepatic Cholangiocarcinoma after Right Hemihepatectomy and Roux-en-Y Anastomosis

Łukasz Krupa1,2, Edyta Niemiec1, Anna Jadwisiak1, Marcin Krawczyk3,4, Robert Staroń1,2

1) Department of Gastroenterology and Hepatology with Internal Disease Unit, Teaching Hospital No 1 in Rzeszów, Rzeszów, Poland; 2) Medical Department, University of Rzeszów, Rzeszów, Poland; 3) Department of Medicine II, Saarland University Medical Center, Saarland University, Homburg, Germany; 4) Laboratory of Metabolic Liver Diseases, Department of General, Transplant and Liver Surgery, Medical University of Warsaw, Warsaw, Poland

Endoscopic ultrasound (EUS)-guided biliary drainage (BD) is now an established endoscopic technique, being mainly used after unsuccessful endoscopic retrograde cholangiopancreatography (ERCP) or in case of altered gastrointestinal anatomy [1] in patients with malignant biliary stenosis [2]. It provides similar clinical success rates compared to percutaneous transhepatic biliary drainage (PTBD) and is associated with fewer adverse events as compared to PTBD [3].

A 44-year-old male patient with cholangiocarcinoma (Bismuth type 3A) treated with right sided hemihepatectomy and Roux-Y hepaticojejunostomy 12 months before, was admitted to our department with obstructive jaundice due to tumor recurrence in the liver hilum. He underwent a laparoscopy-assisted ERCP in another center, which was unsuccessful. The patient was consented for EUS-guided hepaticogastrostomy to our department.

His dilated left sided intrahepatic bile duct was punctured through the stomach wall with a 19-gauge needle and cholangiogram was performed (Fig. 1), revealing dilated intrahepatic ducts and a stricture at the level of the liver hilum. An ERCP wire was inserted into the left intrahepatic duct and hepaticogastrostomy was performed. Subsequently, an 8 cm partially covered self-expanding metal stent Hannarostent Biliary (NC) was inserted, anastomosing the lumen of the stomach and the left intrahepatic bile duct (Figs. 2 and 3). We did not record immediate nor delayed complications as the result of the procedure and the patient’s serum bilirubin improved within two weeks and he continued to receive chemotherapy.

Our patient had malignant biliary obstruction and complex, surgically altered anatomy and in this case, EUS – guided hepaticogastrostomy was performed as a rescue procedure. Endoscopic ultrasound-guided BD for such patients is a novel but safe drainage technique after failed ERCP [4]. It is reported to have a higher technical success rate than ERCP for such complex cases [5].

Corresponding author: Łukasz Krupa, krupasl@yahoo.com

Conflicts of interest: None to declare.

REFERENCES