Kasai-Like Portoenterostomy for Multiple Biliary Duct Reconstruction After Extended Liver Resection of Perihilar Cholangiocarcinoma

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ABSTRACT

Background. Surgical resection remains the best therapeutic option for the long-term survival of patients with perihilar cholangiocarcinoma (PCC).¹ For patients presenting with Bismuth type 3 or 4 tumors, left or right extended liver resection has been shown to be feasible.² The Achilles heel of the procedure remains biliary reconstruction due to multiple small-diameter remnant liver bile ducts.³ This study showed how a Kasai-like portoenterostomy allows circumvention of this difficulty.

Methods. A 57-year-old woman with a type 3a PCC invading the main portal vein bifurcation underwent a right hepatectomy with en bloc resection of segment 4b, the caudate lobe, and the extrahepatic common bile duct; hepatic pedicle lymphadenectomy; and main portal vein bifurcation reconstruction.⁴ The cross-section of the left biliary plate was tumor-free at frozen section analysis but involved three small biliary ducts originating from segments 2, 3, and 4a. The biliary plate and the distance between each duct were too large to allow unification. A Roux-en-Y portoenterostomy, inspired by the Kasai procedure,⁵ was performed between

the umbilical plate and the extramucosal wall of an efferent Roux-en-Y jejunal limb. Two temporary external trans-portoenterostomy drains were placed according to the Voelker technique.

Results. The postoperative course was uneventful, and the patient was discharged on postoperative day 8. The two trans-portoenterostomy drains were removed after 6 weeks, and patient was disease-free at the 2-year follow-up evaluation.

Conclusions. In extended PCC, Kasai-like portoenterostomy may facilitate complex biliary reconstruction when multiple biliary ducts are involved.

DISCLOSURE There are no conflicts of interest.

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