

VI.6. — LIVER RESECTION AND VASCULAR RECONSTRUCTION UNDER PROTECTIVE INTRAPORTAL COOLING DURING A TOTAL LIVER CLAMPAGE.

Ch. Honoré, A. De Roover, O. Detry, M. Meurisse, P. Honoré.

C.H.U. Sart Tilman, Liège, Belgium.

Large hepatic resections still remain a challenge for a safe but radical resection. One of the worst situation is facing when the tumours are localized close to, and encasting the 3 main sus-hepatic veins. The parenchymal preparation by portal embolization is important and now, largely used. The venous outflow is also of importance, but little is published about interventional preoperative procedures. When prolonged normothermic hepatic ischemia is expected, it is likely to consider the intraportal cooling.

We present a patient with an intrahepatic cholangiocarcinoma, already treated (chemotherapy and biliary endoprosthesis) and operated (attempt to resection) before. The tumour was resected (segments 1,4,5,6,7,8) including the extrahepatic bile duct and the 3 ostia of the main sus-hepatic veins. The vascular reconstruction necessitated a venous graft (internal jugular vein) between the intraparenchymal left hepatic vein and the vena cava (reconstructed as well). This surgery exposed to a serious life-threatening risk. The prolonged hilar clampages, the small residual liver parenchyma, and the hemodynamic instability associated to a total clampage of the vena cava necessitated the procedures described here. We performed a part of the operation, under complete vascular liver clampage, but with continuous cold perfusion (HTK/4°C) during 1 hour. In addition, veno-venous by pass was used during the caval clampage.

The postoperative hepatic biology were moderately abnormal for less than 2 weeks. The patient is alive and disease free for 33 months.

The peroperative cold protection of the liver's parenchyma could extend the safety of resection for complex tumours, particularly those involving sus-hepatic veins and vena cava.