extended right hepatectomy with right hemicolectomy 1, central hepatectomy 1, hepatic metastasectomy 1. Kelly's clamp crush technique required less time to transect liver parenchyma with a significant $P=0.001$. Difference in blood loss was statistically not significant with $P=0.249$. The number of days in hospital postoperatively was lesser in patients undergoing Kelly's clamp technique which was statistically significant with $P=0.049$. Three patients developed surgery-related complications; all were from the CUSA group, $P=0.317$.
Conclusion: Kelly's clamp crush technique for liver parenchymal transection has lesser parenchymal transection time, and shorter hospital stay but no difference in terms of intra-operative blood loss or postoperative morbidity compared with CUSA technique.

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RESECTION OR TRANSPLANTATION FOR EARLY HEPATOCELLULAR CARCINOMA IN A CIRRHOTIC LIVER—SIZE DOES MATTER

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Background: The best curative option resection or liver transplantation (LT) for early hepatocellular carcinoma in cirrhotic patients (HCC-cirrhosis) continues to be debated.
Aim: An intention-to-treat analysis to determine the best curative option in <5 cm HCC cirrhosis with recurrence-free survival (RFS) and overall survival (OS) as primary end points.
Method: We studied outcomes of resection, Group R ($n=97$) and LT, Group T ($n=101$) in HCC-cirrhosis patients with a single tumor <5 cm over a 20-year period January 1990 to December 2010.
Result: There were more Childs A patients in Group R and a longer diagnosis-to-treatment delay in Group T. There was no difference in the postoperative mortality (4.1% vs 3.0%, $P=0.72$) or morbidity (19.1% vs 24.7%, $P=0.35$) between Groups R and T, respectively. Tumor recurrence was higher in Group R (62% vs 11% in Group T, $P=0.0001$). The 5-year OS (77% vs 51%, $P=0.0009$) and RFS (77% vs 19%, $P=0.0001$) were significantly better in Group T. Fifty-five percent of Group T patients were alive without the disease at last follow-up compared with 27% in Group R ($P=0.0001$). On multivariate analysis, resection as the surgical procedure, tumor diameter ≥3 cm at diagnosis and the presence of microvascular tumor invasion (MVI) were poor prognostic factors for both OS and RFS. In Childs A patients with HCC (≤3 cm), the OS following resection and LT was similar.
Conclusion: Overall, LT is the best intention-to-treat curative strategy for cirrhotic patients with an early HCC, and Childs A patients with tumor ≤3 cm may benefit from resection. These results could serve to provide honest, evidence-based information to early HCC-cirrhosis patients who are candidates for either resection or LT.

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RIGHT HEPATECTOMY AS A MODEL FOR ASSESSING THE RISK OF MAJOR LIVER RESECTION—A COMPARISON OVER TWO CONSECUTIVE DECADES

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Background: Previous studies have analyzed changing trends in outcomes of hepatic resection in terms of type and extent of hepatectomy. Pure right hepatectomy (PRH) represents a model of anatomical hepatectomy and could serve as an indicator of the risk of major liver resection.
Aim: To study the evolution of PRH over 2 decades and to assess the impact of advancements in techniques, instrumentation, and a better understanding of the liver physiology on early postoperative outcomes.
Method: From 1989 to 2008, of 1075 liver resections, 127 were PRH-extended resections, contralateral/extrahepatic-associated procedures, thoracoabdominal or laparoscopic approach were excluded. Studied criteria included patient and tumor characteristics, intra-operative variables, and early postoperative outcomes. Two periods (1989–1998), 46 cases and (1999–2008) 81 cases were compared.
Result: The second decade saw a two-fold increase in patients with hepatocellular carcinoma, a higher ASA grade ($P=0.0001$), larger tumor load ($P=0.01$), increased use of pre-operative systemic chemotherapy ($P=0.025$), and portal vein embolization (PVE) ($P=0.016$). There was a significant decrease in the intra-operative blood loss ($P=0.0001$) and transfusion requirements (30% vs 7%, $P=0.002$) and the introduction of the anterior approach (0% vs 44%). Morbidity (20%) and mortality rates (2.2% vs 3.7%) were similar in both periods. The 3 recent deaths could be explained by an extension of indications to patients with cirrhosis ($n=2$) or major comorbidity ($n=1$).
Conclusion: Recent years saw an extension of indications of PRH to patients with more advanced tumors, a functionally compromised liver or more comorbidities. Reduction of blood loss, adoption of newer techniques such as pre-operative PVE, and the anterior approach are instrumental in limiting postoperative morbidity and mortality. Attention should remain directed to the adequate balance between the cost of extending the indications and achieving the goal of cure by resection.