

A scoring system to predict the liver transplantation for biliary atresia after Kasai portoenterostomy

葉錦瑩

Jiang CB;Lee HC;Yeung CY;Sheu JC;Chang PY;Wang

NL and Yeh CY.

摘要

Abstract

A retrospective analysis was performed of the records of 133 patients with extrahepatic biliary atresia (EHBA) who had undergone a Kasai portoenterostomy. The patients were divided into a non-transplantation group who survived but did not receive liver transplantation after the procedure and a failure group of those who died or received liver transplantation. A score was calculated that assessed nine factors, including laboratory values and complications. The data were assessed at the time complications occurred. The scores were analysed by a trend analysis to see if serial scores predicted the evolution of liver disease. A receiver operating characteristic (ROC) curve was plotted to assess the optimal cut-point for the scoring system. There were 98 patients in the non-transplantation group and 35 in the failure group. The latter group had significantly higher post-operative bilirubin (9.3 ± 7.2 mg/dl versus 3.5 ± 3.1 mg/dl), ALT (136 ± 89 U/l versus 92 ± 88 U/l), prothrombin time, and incidence of cirrhosis, ascites, oesophageal varices, portal hypertension, cholangitis and sepsis than the non-transplantation group ($P < 0.05$). A score of 8 had a high sensitivity (96.9%) and specificity (89.5%) for predicting the need for liver transplant. Conclusion: based on easily available clinical information, our scoring system can predict which patients with biliary atresia who have already undergone a Kasai procedure should be considered for liver transplantation.