Risk assessment of hepatitis B virus-related hepatocellular carcinoma development using liver stiffness measurement (FibroScan®)

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Liver stiffness measurement (LSM) using FibroScan® accurately assesses the degree of liver fibrosis and the risk of hepatocellular carcinoma (HCC) development in patients with chronic hepatitis C (CHC). This study investigated the utility of LSM as a predictor of HCC development in patients with chronic hepatitis B (CHB). A total of 1,130 patients with CHB who underwent LSM (without HCC or a past history of it) were enrolled in this study and examined between May 2005 and December 2007. After LSM was performed, patients attended regular follow-ups as part of a surveillance program for the detection of HCC. The mean age of the patients (767 men, 363 women) was 50.2 years and the mean LSM was 10.3 kPa. During the follow-up period (median, 30.7 months; range 24.0~50.9 months), HCC developed in 57 patients (2.0% per 1 person-year). The 1, 2, and 3 year cumulative incidence rates of HCC were 0.80%, 3.26%, and 5.98%, respectively. In univariate and subsequent multivariate analysis, together with old age, male gender, alcohol consumption greater than 80 g/day, serum albumin, and hepatitis B e antigen positivity, patients with a higher LSM value were at a significantly greater risk of HCC development, with a hazard ratio of 2.87 (95% confidence interval [CI], 1.18~6.95; p=0.019) when LSM value 13.1-18 kPa, 3.21 (95% CI, 1.19~8.62; p=0.02) when LSM value 18.1~23 kPa and 4.99 (95% CI, 1.82-13.72; p<0.001) when LSM value >23 kPa, as compared to LSM value \leq 13 kPa. Conclusion: Our data suggest that LSM can be used as an effective predictor of HCC development in patients with CHB.

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Endoscopic infundibulotomy is effective and safe in patients with periampullary diverticulum

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Background/Aims: Endoscopic infundibulotomy is performed when standard biliary cannulation methods have failed. The presence of periampullary diverticulum (PAD) is thought to make endoscopic infundibulotomy difficult and unsafe procedure. The aim of this study was to compare the efficacy and safety of endoscopic infundibulotomy according to the presence of PAD after failure of conventional ERCP cannulation techniques. **Methods:** We retrospectively analyzed 31 patients with PAD and 116 patients without PAD who underwent endoscopic infundibulotomy between December 2005 and July 2010 at Chonnam National University Hospital. **Results:** A total of 1416 patients underwent ERCP over the 4.5 year study period. Endoscopic fistulotomy was successfully performed in 137/147 patients (92.5%). The mean age was 68.9 years in 'PAD' group and 73.5 years in 'control' group (p=0.01). The number of procedures was 1.62 in 'PAD' group and 1.71 in 'control' group (p=0.155). The success rates of fistulotomy in the two groups were similar: 96.8% in 'PAD' group and 92.2% in 'control' group (p=0.689). There was no significant difference in complication rates between the 2 groups, including pancreatitis, bleeding, and perforation. **Conclusions:** Endoscopic fistulotomy is an effective and safe technique in patients with periampullary diverticulum for accessing the biliary system after failure of standard CBD cannulation.

Key words: Fistulotomy, Periampullary diverticulum, Cholangiopancreatography, Endoscopic Retrograde