

Preliminary esophageal motility investigation of esophageal varices in liver cirrhosis

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Abstract

AIM: To investigate prospectively the effects of esophageal varices on esophageal function, we performed esophageal manometry on 19 cirrhotic patients with esophageal varices.

METHODS: 13 males and 6 females in patients, mean age 46 years. The type of cirrhosis was HBsAg (+) in 15, HCV-Ag (+) in 1, schistosomiasis in 2, and alcoholic in 1. Hepatic function in accordance with child classification, 4 were grade A, 13 grade B, 2 grade C. The endoscopic evidence of varices: The 11 cases were mild, 5 cases middle, and 2 cases serious. 30 healthy volunteers were selected as controls.

RESULTS: (1) The mean resting pressure in esophageal variceal group was 21.5 ± 6.2 mmHg, and in control group was $18.7 \pm$

4.7 mmHg ($P > 0.05$). There were no significant difference in mild variceal patients between middle and serious variceal patients, and the same between non treatment group and EVS/EVL group. (2) Body of the esophagus: In the lower part of esophagus with varices showed a significantly decreased amplitude (PA), increase of the duration (PD) and the velocity (PV) of primary peristaltic waves with normal controls ($P < 0.05$). The values of PA, PD, PV in patients were 66.51 ± 34.0 mmHg, 38 ± 1.2 s, 4.3 ± 2.4 mmHg/s, respectively; While in volunteers were 90.2 ± 53.1 mmHg, 3.2 ± 0.6 s, 5.7 ± 2.1 mmHg/s, respectively. The results also showed the decreased PA and increase PD in middle and serious variceal group in comparison with mild variceal group. There was no significant difference among 6 cases treated by EVS or EVL and other 13 cases, the reason may be lack of sufficient patients.

CONCLUSION: In our opinion, the esophageal motility changes in liver cirrhosis patients with varices were the decreased PA, increase of PD and PV in lower part of esophagus, and the changes may be associated with the degree of esophageal dysfunction, and it is necessary to use prokinetic drugs for patients after EVS.

Key words: Esophageal motility; Esophageal varices; Liver cirrhosis

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