Clinicopathological Risk Factors for Early Carcinoma in Colorectal Neoplasia

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Background and Aims: Adenomas with high-grade dysplasia (HGD) or early carcinoma usually bridge to advanced colorectal cancers, however, only a few studies have investigated the clinicopathological risk factors associated with HGD or early carcinoma in well-defined cohorts of patients.

Methods: We analyzed data from consecutive patients with HGD or early carcinoma in colorectal neoplasias, who were diagnosed between June 2006 and February 2011. The clinicopathological characteristics of patients with HGD, intramucosal carcinoma or invasive carcinoma were compared, and multivariate logistic regression analysis was used to elucidate the possible risk factors associated with carcinoma.

Results: Out of 538 patients who had been diagnosed with HGD or early carcinoma during the study period, we excluded 234 patients and analyzed the data from 304 consecutive patients who were enrolled in this study. The 304 patients were divided into three categories: patients with HGD (n=244), intramucosal carcinoma (n=35) and invasive carcinoma (n=25). In our univariate analysis, age, and size and shape of lesions were associated with invasive carcinoma. According to multivariate logistic regression analysis, age ≥60 years (OR 2.53, 95% CI=1.21-5.30) and large neoplasia ≥10 mm (OR 3.40, 95% CI=1.54-7.47) were identified as risk factors for carcinoma.

Conclusions: The clinicopathological indices for the propensity of carcinoma in colorectal neoplasia were lesion size ≥10 mm and age ≥60 years. Our findings may be useful for the identification of neoplasias with HGD or carcinoma that require cautious colonoscopy.

Key Words: High-grade dysplasia (HGD); Colorectal carcinoma; Colorectal adenoma; Intramucosal carcinoma