내시경 치료를 위한 인환세포 조기위암과 저분화 조기위암의 임상병리학적 특징

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Signet Ring Cell EGC Is more Amenable to Endoscopic Treatment Than Is Poorly Differentiated EGC

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Background: Recently endoscopic submucosal dissection has been carefully applied in undifferentiated early gastric cancer (EGC). Individual guidelines for endoscopic treatment of poorly differentiated EGC and signet ring cell EGC do not exist. The aim of this study was to investigate and compare the clinicopathologic features of these two types EGC in order to help guide the application of endoscopic treatment.

Methods: Patients receiving radical gastrectomy for treatment of EGC were selected. Between January 2005 and December 2008, 288 patients with poorly differentiated EGC and 419 patients with signet ring cell EGC were enrolled. Their medical records were reviewed retrospectively.

Results: Poorly differentiated EGC had higher rates of male gender, old age (≥45 years), long tumor size (>20 mm), ulcer, submucosal invasion, lymph node metastasis and lymphovascular invasion compared to those of signet ring cell EGC. In the multivariate analysis, poorly differentiated EGC was significantly associated with ulcer (odds ratio [OR]: 2.4), submucosal invasion (OR: 3.6) and lymphovascular invasion (OR: 2.0) compared to those of signet ring cell EGC. The lymph node metastasis rate was 14.2% in poorly differentiated EGC and was 5.7% in signet ring cell EGC. Long tumor size, submucosal invasion and lymphovascular invasion were independent risk factors for lymph node metastasis in both types of EGC. Young age was independently associated with lymph node metastasis in only poorly differentiated EGC.

Conclusions: Signet ring cell EGC has clinicopathologic features more favorable to endoscopic treatment than those poorly differentiated EGC. Therefore, these two types of EGC should be approached separately, not as a united type of undifferentiated histology, during the planning of endoscopic treatment.

Key Words: Early gastric cancer, Endoscopic submucosal dissection, Lymph node metastasis, Risk factor