Clinical Implication of Endoscopic Gross Appearance in Early Gastric Cancer: Revisited

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Background/Aims: Macroscopic appearance of early gastric cancer (EGC) is known to reflect growth pattern of the cancer. Thus, endoscopic appearance may have the role as a predictor of clinical behavior of the cancer. The aim of study was to investigate clinical behavior according to endoscopic appearance in EGC.

Methods: Between January 2005 and December 2008, 1,845 patients were diagnosed as EGC and underwent surgery. The clinicopathologic characteristics were analyzed according to endoscopic gross appearance. Endoscopic findings were classified by predominant type as elevated, flat and depressed type. Flat and depressed types were categorized into non-elevated type.

Results: The proportion of elevated, flat, and depressed type was 16.6%, 28.6%, and 54.8%, respectively. Elevated type was predominant gross appearance in well/moderate differentiation, whereas flat and depressed type in signet ring cell and poorly differentiation respectively. When compared between elevated and non-elevated types, submucosal invasion, lymphovascular invasion (LVI), and lymph node metastasis (LNM) were higher in elevated type than non-elevated type. In differentiated EGC, submucosal invasion, LVI, LNM, and multiplicity were significantly higher in elevated type than non-elevated type. These patterns were significantly common in order from elevated, depressed, and flat type. In undifferentiated EGC, submucosal invasion, LVI, and perineural invasion were significantly higher in elevated type than non-elevated type. These patterns were significantly common in order from elevated, depressed, and flat type. However, LNM was not significantly different according to gross appearance in undifferentiated EGC.

Conclusions: Clinical behavior was different according to endoscopic appearance in EGC. Endoscopic appearance of EGC may be helpful to predict clinical behavior, especially differentiated EGC.

Key Words: Early gastric cancer; Endoscopic appearance; Clinical behavior