Signet Ring Cell Mixed Histology May Show More Aggressive Behavior than Other Histologies in Early Gastric Cancer

Background: Signet ring cell carcinoma (SRC) of the stomach has been known to have different microscopic and biologic characteristics compared to non-SRC. Thus, a pathologic report has documented partly SRC component with other main histologies in gastric cancer. However, the clinical significance of SRC mixture has not been reported. The aim was to investigate clinicopathologic features of mixed-SRC histology in early gastric cancer (EGC). Methods: Between 1999 and 2005, 2208 patients were diagnosed with EGC and underwent surgery at Severance and Gangnam Severance Hospital. Among them, 156 patients were diagnosed with adenocarcinoma with partly SRC (mixed-SRC group), 1,512 with only adenocarcinoma (adenocarcinoma group), and 540 with SRC (SRC group). Clinicopathologic characteristics among the mixed-SRC, adenocarcinoma, and SRC groups were analyzed. Results: The SRC group was more significantly associated with younger age, female, mid-body location, mucosa-confined, depressed type, lower lymph node metastasis (LNM), lower lymphovascular invasion, and a better survival rate than the adenocarcinoma group. The mixed-SRC group was more significantly associated with younger age, female, upper-body location, and depressed type than the adenocarcinoma group, similar to the SRC group. However, the mixed-SRC group showed more submucosal invasion, larger size, and higher LNM than SRC and adenocarcinoma groups. Also, a mixed-SRC component was one of the independent risk factors of LNM. Conclusions: The mixed-SRC group displayed different clinicopathologic characteristics from other groups. Mixed-SRC histology in EGC showed more aggressive biologic characteristics than SRC and adenocarcinoma. Thus, clinical considerations of mixed-SRC histology may be helpful to decide on a specific cancer treatment.

Clinical and Pathologic Features of Elderly Gastric Cancer

Background: Gastric cancer is one of the most common cancers in Korea and the incidence of which is great in elderly patients. However, not much is known about elderly gastric cancer. The aim of this study was to evaluate the specific features of gastric cancer in elderly patients. Methods: We reviewed medical records of 1107 patients who had undergone radical gastrectomy for gastric cancers between June 2005 and December 2009. All the patients were divided into two groups: Non-elderly group aged under 65 (n=676) and elderly group aged 65 and above (n=431). Results: There were more symptomatic patients among elderly group compared with non-elderly group (54.2% vs. 62.1%; p<0.001). Comorbidity was more prevalent in the elderly group (29.6% vs. 61.9%; p<0.001). The elderly group showed higher frequency of elevated tumor markers (CEA: 4.9% vs. 8.7%; p=0.041), CA19-9: 6.1% vs. 13.2%; p=0.001) and advanced diseases (42.5% vs. 49.4%; p=0.023). There were no significant differences in N stage (62.4% vs. 58.2%; p=0.164) or H. pylori status (63.6% vs. 57.5%; p=0.153) between the two groups. More cancers were located in lower third among the elderly group (45.1% vs. 51.3%; p=0.045). The elderly group had more patients with Lauren intestinal type (40.7% vs. 38.2%; p=0.001) and well (8.0% vs. 13.7%; p=0.002) or moderately differentiated adenocarcinoma (29.6% vs. 44.1%; p<0.001). Rate of complication did not differ between the two groups (6.1% vs. 8.1%; p=0.187). Microsatellite instability (p=0.001) and p53 overexpression (p=0.001) were more frequent in the elderly group. Conclusion: Elderly gastric cancer showed a tendency of being diagnosed at more advanced stage with symptoms. However, it was related to pathologic features known for favorable prognosis except for p53 overexpression. Also surgery in elderly was as tolerable as in young patients. Thus we recommend to consider surgery more frequently for elderly patients with operable gastric cancers.