

The Outcomes and Clinicopathologic Analyses for Gastrointestinal Stromal Tumor (GIST) of the Stomach

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Purpose: The aims of this study were to reveal the clinicopathologic characteristics and define the significant prognostic factors of the patients with gastrointestinal stromal tumor (GIST) of the stomach. We also analyzed the outcomes of the patients who were treated in Korea University Hospital.

Methods: We retrospectively studied 40 patients who were treated for primary GIST of the stomach from 1996 to 2003. Clinicopathologic characteristics and immunohistochemical markers (CD34, SMA, Desmin, NSE, S-100) were investigated. We divided the patients into high and low risk groups by tumor size and mitotic count for comparative analysis.

Results: A comparative analysis revealed tumor size, mitotic count, clinical symptoms, preoperative pathologic diagnosis, ulceration and necrosis were statistically significant variables between two groups. In univariate analysis, tumor size, mitotic count, ulceration, necrosis and abnormal endoscopic ultrasound findings were associated with disease-free survival, but, multivariate analysis disclosed mitotic activity was the only independent factor. Eight patients were recurred during follow-up period, and four of them were treated with STI-571(Imatinib mesylate). The treated patients have survived until now, however two of non treated patients were died with disease progression.

Conclusion: Present results suggest that mitotic activity could be considered as a useful prognostic marker. However, tumor size, ulceration and necrosis which have been known to be significant factors for survival, should not be used as prognostic indicators. We may consider STI-571 to be used in adjuvant setting because the drug has shown anticancer activity in the patients with recurrence or metastasis.