Gastrointestinal stromal tumor (GIST) in southern Taiwan: a clinicopathologic study of 93 resected cases

莊世松

Li CF;Chaung SS;Lu CL;Lin CN;

摘要

Abstract

The purpose of this study was to determine the clinicopathologic features of gastrointestinal stromal tumor (GIST) in southern Taiwan. The pathology files from a medical center in southern Taiwan (1993 to 2003) were searched for primary mesenchymal tumors of the gastrointestinal tract. Hematoxylin/eosin sections and history were reviewed, and immunohistochemistry was performed using anti-CD117, CD34, smooth muscle actin (SMA), and S-100 protein. Only primary resected GISTs were included in this study. Univariate and multivariate analyses were carried out using the T-test to evaluate the significance of primary tumor size and mitotic activity for the prediction of recurrence and metastasis. A total of 121 surgically resected primary mesenchymal tumors were identified, and 93 of these were GISTs. These 93 patients showed a slight female predominance (male: female = 1:1.2). The clinical presentations were variable and site-dependent. The most common tumor locations were the stomach (57%) and the small intestine (39%). Microscopically, 88 tumors (95%) were composed of spindle cells, the remaining five (5%) consisted of mixed epithelioid and spindle cells. No pure epithelioid type GIST was found. In addition to CD117, 66 cases (71%) were positive for CD34, 23 cases (25%) were positive for SMA, and 19 cases (21%) were positive for S-100. In a mean follow-up time of 27.3 months (median: 26 months), 19 cases (20.6%) were clinically malignant and mainly manifested as liver metastases (seven cases, 37% of malignant GISTs). Univariate analysis revealed that both primary tumor size and mitotic activity were significantly increased in the group affected by recurrence and/or metastasis ($p = 0.001$ and 0.035, respectively). Compared to GISTs in the western countries, those in southern Taiwan are characterized by a slight female predominance, a relatively higher frequency of small intestinal localization, a higher rate of S-100 protein expression, and a less aggressive behavior. Tumor size and mitotic activity were useful predictors of malignancy.