Subtype Classification and Clinicopathological Features of Gastric Neuroendocrine Neoplasms: 487 cases of multi-center retrospective analysis

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Abstract

Introduction: Nowadays, the subtype classification for gastric neuroendocrine neoplasms (g-NENs) is controversial, we analyzed the clinicopathological features and prognosis of g-NENs using a modified subtype classification in China.

Methods: A total of 487 cases with g-NENs were collected. The criteria of subtype classification for g-NENs are as follows: well-differentiated g-NENs are divided into 3 types: type 1, with hypergastrinemia and achlorhydria, are associated with autoimmune gastritis; type 2, with hypergastrinemia and Zollinger-Ellison syndrome, are related with gastrinoma or multiple endocrine neoplasia type 1; type 3 are sporadic disease with normal gastrin and gastric acid secretion; poorly-differentiated neuroendocrine carcinoma and mixed adenoneuroendocrine carcinoma belong to type 4. Data were analyzed by univariate and multivariate analysis for evidence of patient survival.

Results: Among the 487 g-NENs patients, there were 149 (30.6%) with type 1, 8 (1.6%) with type 2, 84 (17.3%) with type 3 and 246 (50.5%) with type 4. The 5-year overall survival rates were 98.7%, 100%, 65.9% and 32.2% respectively. neuroendocrine carcinoma G3, distant metastasis, type 4 tumours and chemotherapy were independent prognostic factors among patients with g-NENs.

Conclusion: G-NENs were heterogeneous, ranging from indolent to highly malignant biological behaviour. The modified Four-type classification is useful for management and prognostic evaluation of g-NENs.

Keywords: gastric neuroendocrine neoplasms; four-type classification; clinicopathological features; prognosis
Introduction

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Figure A. Kaplan–Meier survival curve of patients with gastric neuroendocrine neoplasms
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Conclusion

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