Clinicopathological Features of 66 Cases of Type 3 Gastric Neuroendocrine Neoplasms: A Retrospective Analysis

Xudong Qiua, Dou Doua, Yu Zhangb, Qing Liua, Jixi Liuc, Jie Luod, Pan Zhanga, Yuanliang Lia, Fei Su a, Zhirong Qi a, Jie Chenb, Huangying Tan a

a. Department of Integrative Oncology, China-Japan Friendship Hospital, Beijing, China
b. Department of Gastroenterology, The First Affiliated Hospital of Sun Yat-sen University, Guangzhou, China
c. Department of Gastroenterology, China-Japan Friendship Hospital, Beijing, China
d. Department of Pathology, China-Japan Friendship Hospital, Beijing, China

Abstract

Introduction

Methods

Results

Conclusion

Keyword: type 3, g-NET, survival

• Introduce: Well-differentiated gastric neuroendocrine neoplasms (g-NENs) are divided into 3 types (types 1, 2 and 3), but there are few reports on the clinical features of type 3 g-NENs.

• Methods: The data of 66 patients with type 3 g-NENs confirmed by China-Japan Friendship Hospital and the First Affiliated Hospital of Sun Yat-sen University from Jan. 2010 to Nov. 2017 were retrospectively analyzed. The patients were followed up at clinic, by telephone and through internet communications.

• Results: Of the 66 patients (33 male), the median age was 47.5 years (40.0-56.0 years). Gastroscopy revealed single lesions (56/66) and multiple lesions (10/66); the lesions were polypoid (40/66), ulcerative (15/66), raised (8/66) and other shapes (3/66) in appearance; and the tumor size ranged from 0.2 cm to 12 cm. Fifty-seven patients had serum gastrin levels within the normal range, and 9 patients had slightly increased serum gastric levels. Pathologically, tumors were graded as neuroendocrine tumor (NET) G1 (35/66), NET G2 (23/66), and NET G3 (8/66). The clinical stage at diagnosis was I (27/66), II (13/66), III (12/66), and IV (14/66). Thirty-one patients underwent endoscopic therapy, 22 underwent surgery (3 of these patients received medical treatment later), and 13 received medical treatment. Twelve patients were lost to follow-up, and the median follow-up time was 22.0 (11.0-34.3) months. At the end of follow-up, 11 patients died, and the overall survival rate was 83.3% (100% for stage I, 100% for stage II, 66.7% for stage III and 50.0% for stage IV, P=0.000).

• Conclusion: Type 3 g-NENs were mostly single lesions on gastroscopy. Tumors were mostly pathologically graded as well-differentiated NET G1 and NET G2 lesions, rarely NET G3. More than half of the patients showed no metastasis at the time of diagnosis. The prognosis was related to the clinical stage and grade, and the overall prognosis of type 3 g-NENs was relatively good.

• Keyword: type 3, g-NET, survival
Introduction

• Well-differentiated gastric neuroendocrine neoplasms (g-NENs) are divided into 3 types (types 1, 2 and 3), but there are few reports on the clinical features of type 3 g-NENs.
Methods

• The data of 66 patients with type 3 g-NENs confirmed by China-Japan Friendship Hospital and the First Affiliated Hospital of Sun Yat-sen University from Jan. 2010 to Nov. 2017 were retrospectively analyzed. The patients were followed up at clinic, by telephone and through internet communications.
Results

- Of the 66 patients (33 male), the median age was 47.5 years (40.0-56.0 years). Gastroscopy revealed single lesions (56/66) and multiple lesions (10/66); the lesions were polypoid (40/66), ulcerative (15/66), raised (8/66) and other shapes (3/66) in appearance; and the tumor size ranged from 0.2 cm to 12 cm. Fifty-seven patients had serum gastrin levels within the normal range, and 9 patients had slightly increased serum gastric levels. Pathologically, tumors were graded as neuroendocrine tumor (NET) G1 (35/66), NET G2 (23/66), and NET G3(8/66).

- The clinical stage at diagnosis was I (27/66), II (13/66), III (12/66), and IV (14/66). Thirty-one patients underwent endoscopic therapy, 22 underwent surgery (3 of these patients received medical treatment later), and 13 received medical treatment. Twelve patients were lost to follow-up, and the median follow-up time was 22.0(11.0-34.3) months. At the end of follow-up, 11 patients died, and the overall survival rate was 83.3% (100% for stage I, 100% for stage II, 66.7% for stage III and 50.0% for stage IV, P=0.000).

Figure A. Kaplan–Meier survival curve of patients with type 3 gastric neuroendocrine neoplasms on clinical staging
Clinicopathological Features of 66 Cases of Type 3 Gastric Neuroendocrine Neoplasms: A Retrospective Analysis

Xudong Qiu⁴, Dou Dou⁴, Yu Zhang⁵, Qing Liu⁴, Jixi Liu⁴, Jie Luo⁴, Pan Zhang⁴, Yuanliang Li⁴, Fei Su⁴, Zhirong Qi⁵, Jie Chen⁵, Huangying Tan⁶

a. Department of Integrative Oncology, China-Japan Friendship Hospital, Beijing, China
b. Department of Gastroenterology, The First Affiliated Hospital of Sun Yat-sen University, Guangzhou, China
c. Department of Gastroenterology, China-Japan Friendship Hospital, Beijing, China
d. Department of Pathology, China-Japan Friendship Hospital, Beijing, China

Conclusion

- Type 3 g-NENs were mostly single lesions on gastroscopy. Tumors were mostly pathologically graded as well-differentiated NET G1 and NET G2 lesions, rarely NET G3. More than half of the patients showed no metastasis at the time of diagnosis. The prognosis was related to the clinical stage and grade, and the overall prognosis of type 3 g-NENs was relatively good.