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

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BACKGROUND: 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.