Outcomes of Endoscopic Treatment for the Pyloric Channel Neoplasm: Single Center Experience in Korea

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Background/Aims: Endoscopic treatment of tumors involving the pylorus have been considered as technically difficult. Recently, few studies have reported that pyloric neoplasm could be successfully treated using retroflexion technique in the duodenum. The purpose of this study was to analyze the results of endoscopic treatment for channel neoplasm in the Guro Hospital, Korea University.

Methods: 29 patients of gastric neoplasm involving the pyloric channel were treated by EMR or ESD from January 2007 to March 2011. We retrospectively analyzed the factors affecting en block and complete resection. Also complications associated with treatment were analyzed.

Results: The mean age was 61.3 (43-77). The mean size of tumor was 12.6 mm (2-37). In 5 cases (17.2%), tumor involvement of bulb side of pylorus was confirmed grossly but in other 24 cases, tumor involvement was confined within antral side. Pathologic findings were low grade (51.7%), high grade dysplasia (3.4%), early gastric cancer (41.5%) and carcinoid (3.4%). Only 2 patients (6.9%) were treated by EMR, others were treated by ESD. In 14 patients (48.3%), retroflexion technique was used. The rate of en block resection was 86.2%, but the rate of complete resection was 93.1%. Statistically significant factors affecting en block and complete resection were not found, although 3 cases of piecemeal resection were treated by forward technique (p=0.33). Perforation occurred in 2 patients who were treated by retroflexion technique, but they were recovered without operation. Pyloric stenosis occurred in 2 patients. 1 patient was treated by balloon dilatation and another was resolved spontaneously. There was no major bleeding event and tumor recurrence.

Conclusions: The results of endoscopic treatment for channel neoplasm were effective regardless of age, sex, tumor size, pathology, involvement of bulb side and resection technique. And the complications of channel ESD were relatively rare and mild.

Key Words: Pylorus; Channel neoplasm; ESD; EMR