

# Preemptive Pyloroplasty For Iatrogenic Vagus Nerve Injury In Intrahepatic Cholangiocarcinoma Patients Undergoing Extensive Left-sided Lymph Node Dissection

Shin HWANG<sup>\*1</sup>, Dong-Hwan JUNG<sup>1</sup>, Eun-Kyoung JWA<sup>1</sup>, Yumi KIM<sup>1</sup>

<sup>1</sup>Department Of Surgery, Asan Medical Center, University Of Ulsan College Of Medicine, REPUBLIC OF KOREA

**Background :** Intrahepatic cholangiocarcinoma (ICC) of the left liver often shows left-sided lymph node (LN) metastasis. If gastric lesser curvature is extensively dissected, it can induce an iatrogenic injury to the extragastric vagus nerve branches that control motility of the pyloric sphincter and lead to gastric stasis. To cope with such LN dissection-associated gastric stasis, we performed pyloroplasty preemptively. The objective of this study was to analyze our 20-year experience of preemptive pyloroplasty performed in 10 patients.

**Methods :** We investigated clinical sequences of 10 patients with ICC who underwent preemptive pyloroplasty following left hepatectomy and extended left-sided LN dissection. Incidence of gastric stasis and oncological survival outcomes were analyzed.

**Results :** All 10 patients were classified as stage IIIB due to T1-3N1M0 stage according to the 8th edition of American Joint Committee on Cancer staging system. The overall patient survival rate was 51.9% at 1 year, 25.9% at 2 years, and 0% at 3 years. Seven (70%) patients showed uneventful postoperative recovery after surgery. Two (20%) patients suffered from gastric stasis, which was successfully managed with supportive care. One (10%) patient suffered from overt gastric paresis, which was successfully managed with azithromycin administration for one month.

**Conclusions :** We believe that preemptive pyloroplasty is an effective surgical option to prevent gastric stasis in patients undergoing extensive left-sided LN dissection. Azithromycin appears to be a potent prokinetic agent in gastroparesis.

Corresponding Author : Shin HWANG (shwang@amc.seoul.kr)