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Laparoscopic Pylorus Preserving Gastrectomy with Intra-Corporeal Gastro-Gastrostomy Guided by Intra-Operative Gastroscopy

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Gastric cancer detection is advancing to a point where screening programs can detect gastric cancer at early stages. This allows surgical procedures to be less radical than before. Studies have proven that pylorus preserving gastrectomy is a safe procedure in early T1a and T1b gastric cancers where the tumour location is in the middle third of the stomach. However, due to the small tumour size, determining an appropriate resection margin can be challenging. A few techniques have been developed to overcome this difficulty, and at our centre, we perform intra-operative gastroscopy to synchronize with the laparoscopic view and precisely determine the tumour location for optimal gastric resections. This allows the gastrectomy to be performed safely and prevents inadequate resection leaving tumour cells behind. This video is aimed at sharing our experience in performing pylorus-preserving gastrectomy.

Chapter Summary

00:00:01 Introduction

00:00:10 Case summary

00:00:23 Radiology: X-ray

00:00:30 Radiology: staging CT scan (snapshot)

00:00:38 Schematic diagram for PPG (gastric resection &

lymph node dissection)

00:00:45 Laparoscopic assessment and liver retraction

00:00:51 Marking of important anatomical landmarks

00:01:16 Beginning of dissection over greater curvature:

partial omentectomy

00:01:44 Intra-operative gastroscopy

00:02:45 Take down of the left gastro-epiploic vessels

00:03:32 Dissection of intra-pyloric region

00:04:35 Infra-pyloric artery preservation and right gas-

tro epiploic vessel dissection

00:06:37 Supra-pyloric dissection

00:07:16 Distal gastric transection

00:07:57 Take-down of the left gastric artery and vein

pedicle

00:08:45 Dissection of proximal lesser curvature

00:09:13 Proximal gastric transection

00:09:39 Gastro-gastrostomy reconstruction

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00:12:48 Irrigation of the peritoneal cavity 00:12:53 Resected gastric specimen 00:12:58 Final pathology report

Disclosure

Hyuk-Joon Lee is the president of the Korean Surgical Skill Study Group and Seong-Ho Kong is an editorial board member of the journal, but they were not involved in the peer reviewer selection, evaluation, or decision process of this article. No other potential conflicts of interest relevant to this article were reported.

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