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**The Necessity of Pyloroplasty after Esophagectomy and Esophagogastrostomy in the Gastric Replacement of the Esophagus**

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**Purpose:** In treating carcinoma of the esophagus, a gastric drainage procedure seems to be necessary with esophagogastrotomies because of the inevitable incidental bilateral truncal vagotomy which occurs during the esophagectomy. There are potential hazards with a pyloroplasty such as jeopardizing the blood supply to the mobilized stomach, shortening its length for substitution, leakage, dumping syndrome, and bile reflux gastritis. The aims of the study are to compare the postoperative outcome of patients with and without pyloroplasty after an esophagectomy for esophageal cancer, and to evaluate the necessity of pyloroplasty in the vagotomized intrathoracic stomach after esophageal surgery.  
**Methods:** During the years 1996 to 2001, 23 patients with carcinoma of the esophagus underwent an esophagectomy followed by esophagogastrostomy with or without pyloroplasty. The medical records of the patients were evaluated retrospectively.  
**Results:** There were no statistically significant differences between the pyloroplasty group and the no-pyloroplasty group with regards to the average hospital stay, resumption of oral feeding, removal of the nasogastric tube, and the daily gastric drainage.  
**Conclusion:** Postoperative symptomatic evaluation of patients who had esophageal cancer and underwent an esoph-

agectomy and an esophagogastrostomy, with or without pyloroplasty supports the concept that the drainage procedure is unnecessary in the gastric replacement of the esophagus. (J Korean Surg Soc 2002;63:118-122)

**Key Words:** Esophageal cancer, Pyloroplasty, Esophagectomy

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 (1,2) (gastric stasis) (3)  
 Dragstedt Shafer가 1945  
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 , , , , (hearthum),  
 (regurgitation), , , 가  
 Mann-Whitney U test  
 continuous variable  
 Student T test  
 P < 0.05 .

2)  
 23.0 ± 11.61 , 20.31 ± 9.73,  
 8.54 ± 3.14 , 7.51 ± 2.33  
 3.24 6.54 ± 1.37 6.24 ±  
 42.26 ± 27.25 59.32 ± 34.82 cc  
 (Table 2).

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(Table 3).

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(Table 1).

(Table 4).

**Table 1.** Characteristics of subjects

	No pyloroplasty	Pyloroplasty
Number	13	11
Mean age	58.5 (43 68)	60.4 (48 69)
Sex (M/F)	12/1	10/1
Operation		
THE*	10	8
TAE†	3	3

THE\* = transhiatal esophagectomy; TAE† = thoracoabdominal esophagectomy.

**Table 2.** Comparison of postoperative course

	No pyloroplasty	Pyloroplasty	P-value
Hospital stay	20.31 ± 9.73 (11 43)	23.0 ± 11.61 (14 52)	NS*
Resumption of oral feeding	7.51 ± 2.33 (4 12)	8.54 ± 3.14 (5 17)	
Levin tube removal	6.24 ± 3.24 (1 8)	6.54 ± 1.37 (3 8)	
Daily gastric drainage	42.26 ± 27.25 (0 200)	59.32 ± 34.82 (0 220)	

NS\* = non-specific.

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**Table 3.** Postoperative symptoms

	No pyloroplasty	Pyloroplasty
Dysphagia	1	2
Vomiting	1	2
Nausea	1	1
Diarrhea	1	0
Heartburn	1	0
Regurgitation	1	2
Dumping	0	0

**Table 4.** Postoperative complication

	No pyloroplasty	Pyloroplasty
Gastric stasis	1	1
Pulmonary complication	1	1
Anastomotic leakage	1	0
Mortality	0	0

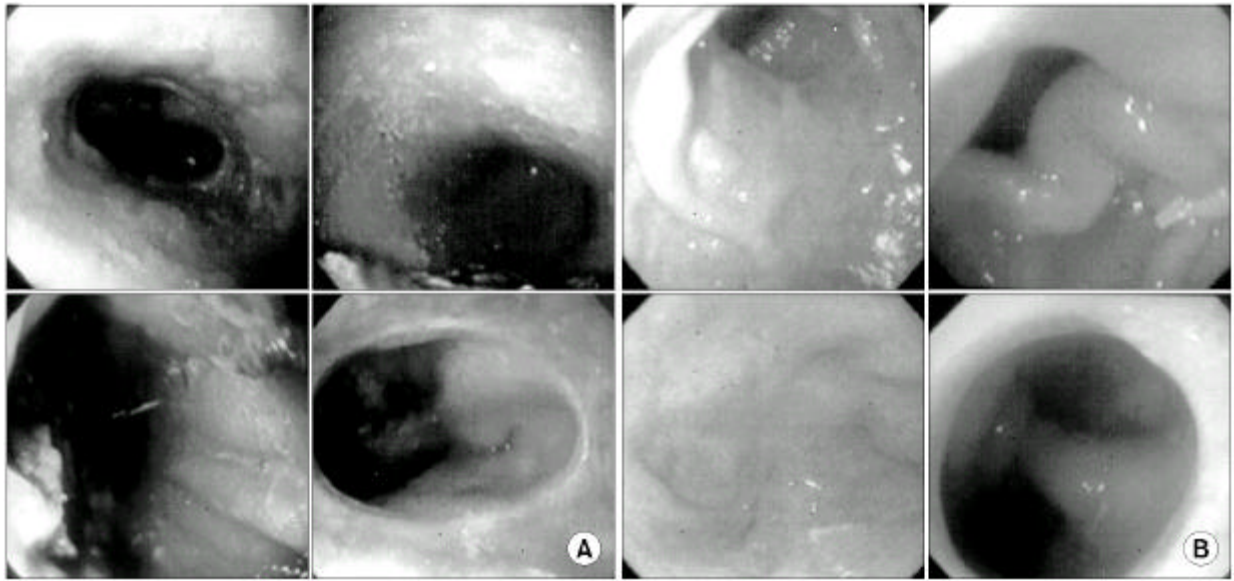


Fig. 1. Gastroduodenoscopic findings during postoperative follow-up period. (A) no pyloroplasty group, (B) pyloroplasty group.

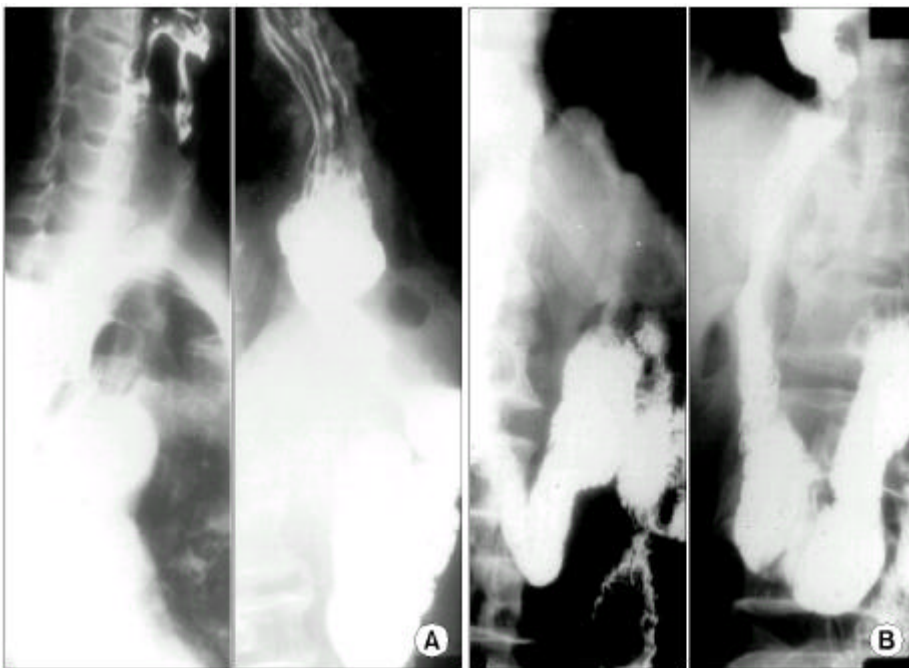


Fig. 2. Esophagram taken during postoperative follow up period. Both showed no gastric outlet obstruction, no anastomotic stricture. (A) no pyloroplasty group, (B) pyloroplasty group.

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(Gastric outlet

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(Suture line)

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Simon L (10)

Oushinori Y (17)

(Pyloroduodenal digital dilation)

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Ranita M (2)

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Hinder RA (8)

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Angom IB (3)

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