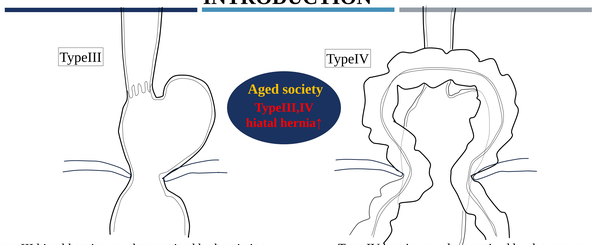
LAPAROSCOPIC ANTERIOR GASTROPEXY FOR GIANT HIATAL HERNIA



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INTRODUCTION



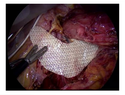
Type III hiatal hernias are characterized by herniating the gastroesophageal junction and the fundus through the hiatus.

Type IV hernias are characterized by the presence of stomach and another organ through the hiatus.

Symptom: vomiting, chronic coughing, dyspnea, chest pain‥

PROBLEMS IN THE GIANT HIATAL HERNIAS IN ELDERLY PATIENTS

- Assessment of physical status before operation
- Repairing with mesh or without mesh
- Reduction the rate of recurrence
  (recurrence rate after repair is 7~33%)





REPORTS ABOUT HIATAL HERNIA REPAIR



A systematic review and meta-analysis of mesh versus suture cruroplasty in laparoscopic large hiatal hernia repair (Am J Surg.2016)

With mesh

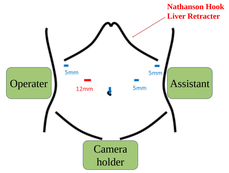


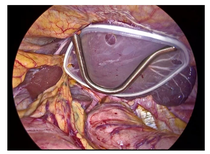
Equal patient satisfaction, quality of life and objective recurrence rate after laparoscopic hiatal hernia repair with and without mesh (Surgical endoscopy .2017)

With mesh

Not decided!

PORT PLACEMENT IN OUR DEPARTMENT





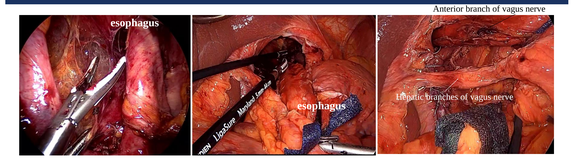
CHARACTERISTICS OF OUR SURGICAL PROCEDURE

- Exposure the crossing site of bilateral crus.
- Straightening esophagus.
- Remove hernia sac as possible.
- Long laparoscopic instruments for mediastinal approach.
- **Gastropexy(long anterior)**



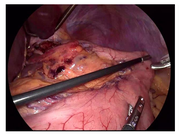


SURGICAL IMPROVEMENT

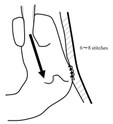


We reduct mediastinal sac as much as possible and mobilize of intraabdominal esophagus. Straightening of thoracic esophagus is needed.

LONG ANTERIOR GASTROPEXY







We perform long anterior gastropexy fixing 6~8 stitches to the left abdominal wall for using non-absorbable barbed suture.

CHARACTERISTICS OF THE PATIENTS

123 patients with type III /IV hiatal hernia who underwent reinforced hiatoplasty (2010.4~2021.12)

		n
Gender	M/F	17/106
Age（average）		74.3
kyphosis	Yes/No	95/28
Type of Hernia	Ⅲ/Ⅳ	105/18
Upside-down stomach	Yes/No	43/80
Incarcerated Organ（TypeⅣ）	Transvers colon/Small intestine/pancreas	14/4/1

SURGICAL OUTCOME

Fundoplication

Toupet : 90



Nissen : 1



Lateral patch : 31



（Others: n=1）

Mesh reinforcement	Yes/No	23(18.7%)/100
Gastropexy	Yes/No	95(77.2%)/28
Operation time(min)		112
Estimated blood loss(ml)		0
Hospital stay after operation(day)		10

SURGICAL OUTCOMES

Mesh	+	+	−	−
Gastropexy	−	+	−	+
N	13	10	15	85
Observation period (days:median)	1114(776-1809)	1561(978-1704)	1038(472-1661)	759(7-1632)
Recurrence（%）	2 (14.3%)	0 (0%)	3 (20.0%)	6 (7.0%)
Re-do（%）	0 (0%)	0 (0%)	2 (13.3%)	2 (2.3%)

No significant difference was found in the recurrence rate between gastropexy and mesh repair (p=0.36).

CHANGE IN THE RECURRENCE RATE

Before addition gastropexy recurrence rate : 18.2%

After addition gastropexy recurrence rate : 6.8%

(p=0.006)

DISCUSSION

- Reducing recurrence rates is required in elderly patients with giant hiatal hernia.
- Gastropexy may reduce the recurrence rate after surgery in the cases of weakness of primary cruroplasty.
- We consider that mesh-related complications may be avoided by the gastropexy.





CONCLUSION

Gastropexy is safe and effective to reduce recurrence for giant hiatal hernia repairs.

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COI Disclosure
Mamiko Takii

The speaker have no financial conflicts of interest to disclose concerning the presentation.