Gastro-Esophageal Reflux Test to Determine Surgical Indication for GERD Patients and Results of Laparoscopic NISSEN Fundoplication

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INTRODUCTION

The indication of laparoscopic anti-reflux surgery for GERD patients is difficult to be determined fairly. We have established “Reflux Test“ as a useful tool to determine surgical treatment for GERD patients.

SURGICAL INDICATION

Reflux Test

At the standing position a patient swallows 300ml barium solution. After total solution goes into stomach, a patient lies down at the flat position. Then a patient changes the position to left lateral decubitus position, flat position, right lateral decubitus position and flat position again every 10 seconds in the order. During this procedure, gastro-esophageal reflux was evaluated and assigned to severe, moderate and slight category. If the reflux was observed slightly up to cervical esophagus, the case was assigned to moderate category. The anti-reflux surgery was considered in the moderate and severe categories.

RESULTS

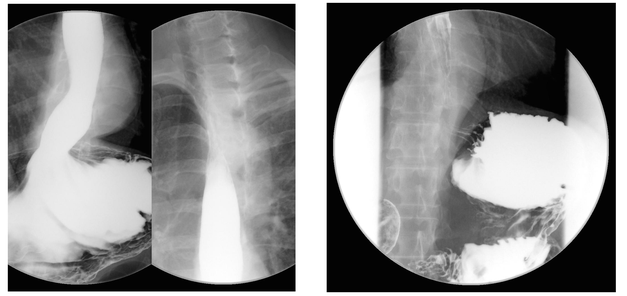
We have performed laparoscopic Nissen procedure in 130 cases. Median follow-up period of this study was 84 months (3-151 months). In 19 cases (14.6%) PPI was restarted before 6 months after the anti-reflux surgery. In 33 cases (26.2%) PPI was restarted after the anti-reflux surgery during the whole follow-up period of this study. The results of the study have shown that the reflux esophagitis was improved obviously after the anti-reflux surgery even in the PPI restarted group which was analyzed by our endoscopic esophagitis grading score (p<0.001).

CONCLUSION

The anti-reflux surgery is most effective for the patients who really have the obvious reflux confirmed by Reflux Test. The results of the laparoscopic Nissen fundoplication were good and satisfied by the patients mostly.

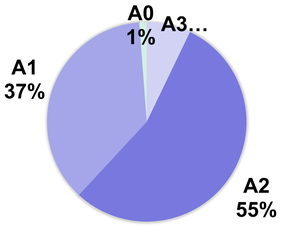
LA Classification	Esophagitis Score
Grade N	0
Grade M	1
Grade A	2
Grade B	3
Grade C	4
Grade D	5

Reflux Test

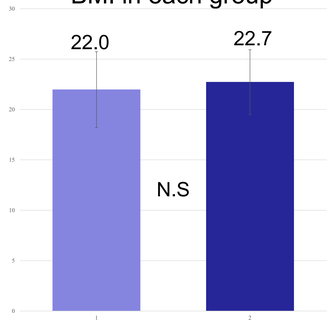


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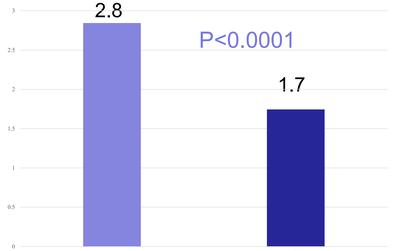
Type of Hiatal Hernia before Surgery



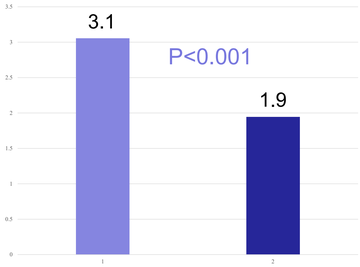
BMI in each group



Esophagitis Score in all cases (62 cases)



Esophagitis Score in restarted group (22 cases)



SAGES 2023 Annual Meeting COI Disclosure
Tatsushi Suwa

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

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