Gastro-Esophageal Reflux Test is valuable to determine the surgical indication for GERD patients and our results of laparoscopic NISSEN fundoplication

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INTRODUCTION

To determine the surgical indication of laparoscopic anti-reflux surgery for GERD patients is difficult. To find out the GERD patients who really need the surgical treatment, we have established “Reflux Test“ as the tool.

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 to the patients in the moderate or severe categories.

RESULTS

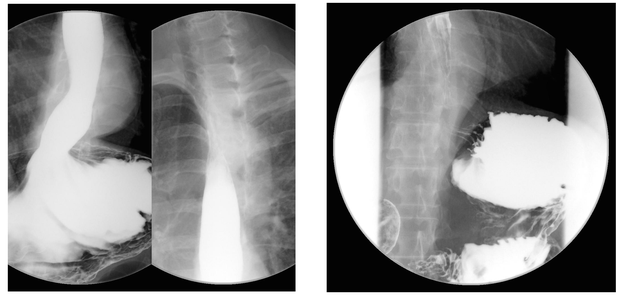
We have performed laparoscopic Nissen procedure in 130 cases for the GERD patients. In this number, the giant hiatal hernia cases which needed surgery without any doubts and with no need for Reflux Test are excluded. Median follow-up period of this study was 91 months (5-163 months). In 25 cases (19.2%) PPI was restarted before 6 months after the anti-reflux surgery. In 45 cases (34.6%) 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 had the obvious gastro-esophageal reflux before surgery. The results of the laparoscopic Nissen fundoplication were good and satisfied by the patients mostly.

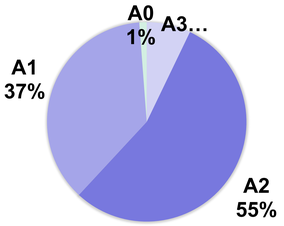
LA Classification	Esophagitis Score
Grade N	0
Grade M	1
Grade A	2
Grade B	3
Grade C	4
Grade D	5

Reflux Test

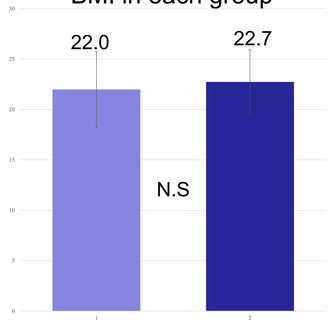


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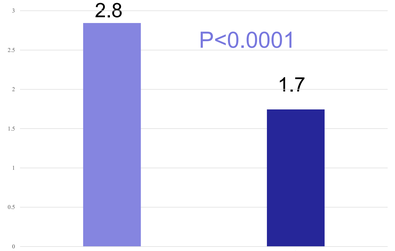
Type of Hiatal Hernia before Surgery



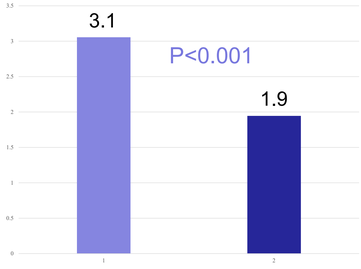
BMI in each group



Esophagitis Score in all cases (62 cases)



Esophagitis Score in restarted group (22 cases)



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

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