Impact of Gastropexy on Recurrence Following Hiatal Hernia Repair: A Retrospective Analysis

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INTRODUCTION

Hiatal hernia repair is commonly performed for symptomatic gastroesophageal reflux and paraesophageal hernias. However, postoperative recurrence remains a significant clinical challenge, with recurrence rates reported in up to 15-30% of cases in prior studies[1].

Various adjunct techniques, including gastropexy, have been proposed to improve gastric fixation and potentially reduce recurrence, though evidence supporting its routine use remains inconsistent[2,3].

This study aimed to evaluate recurrence rates following hiatal hernia repair with and without gastropexy and to characterize recurrence patterns and management strategies in a contemporary surgical cohort.

METHODS

We performed a retrospective analysis of 223 patients who underwent hiatal hernia repair between January 2024 and December 2024.

Patients were divided into two groups: Gastropexy group (n=45 patients) and No gastropexy group (n=178). Hernia recurrence was defined as symptomatic recurrence, radiologic recurrence, or both.

Collected variables included: Age, Sex, BMI, Recurrence status, Recurrence type, and management strategy. Recurrence rates were compared between the two groups, and patterns of recurrence and treatment approaches were analyzed.

RESULTS

A total of 223 patients underwent hiatal hernia repair during the study period. Of these, 45 patients (20.2%) underwent repair with gastropexy, while 178 patients (79.8%) underwent repair without gastropexy. Overall, 38 patients (17.0%) developed hernia recurrence. Recurrence occurred in 6 patients (13.3%) in the gastropexy group compared with 32 patients (18.0%) in the non-gastropexy group. Recurrence patterns and management strategies are summarized in Tables 3 and 4.

Table 1. Patient Characteristics

Variable	Value
Total Patients	223
Mean Age	64 Years
Female	160 (72%)
Male	63 (28%)
Mean BMI	27.8 kg/m²
BMI Range	15.4-49.1

Table 2. Recurrence by Surgical Approach

	Recurrence	No Recurrence	Total	Recurrence rate %
Gastropexy	6	39	45	**13.33**
No Gastropexy	32	146	178	**17.98**
Total	38	185	223	17.04

Table 3. Recurrence Presentation

Recurrence type	Number of Patients	Recurrence (%)
Radiologic only	8	21.05
Symptomatic only	10	26.32
Both	20	52.63
Total	38	100.00

Table 4. Management of Recurrence

Management Strategy	Number of Patients	%
EGD with Dilation	9	23.68
Redo Surgery	7	18.42
Conservative Mx	20	52.63
Both EGD and Redo Surgery	2	5.26
Total	38	100.00

CONCLUSIONS

Hiatal hernia recurrence occurred in 17% of patients following repair. The addition of gastropexy was associated with a lower recurrence rate compared with standard repair alone.
Most recurrences were managed conservatively, while a minority required endoscopic or surgical intervention.
Further prospective studies with larger cohorts are needed to better define the role of gastropexy in preventing hiatal hernia recurrence.

REFERENCES

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