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COMPARISON OF THE OUTCOMES OF CHILDREN WITH AND WITHOUT ANTIREFLUX SURGERY DURING CONGENITAL HIATAL HERNIA REPAIR

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INTRODUCTION

Congenital hiatal hernia (CHH):
Herniation of intraabdominal organs through esophageal hiatus

- Types I-IV [1]
- 50-94% association with GERD in Type I [2].
- Optimal surgical approach remains unclear

AIM: To compare outcomes of children with and without antireflux surgery during CHH repair

METHODS

Retrospective study

Patients with CHH, between 2005-2024

RESULTS

- n=20 patients
- 16 months
(6 days-12 years)
- M:F = 13:7

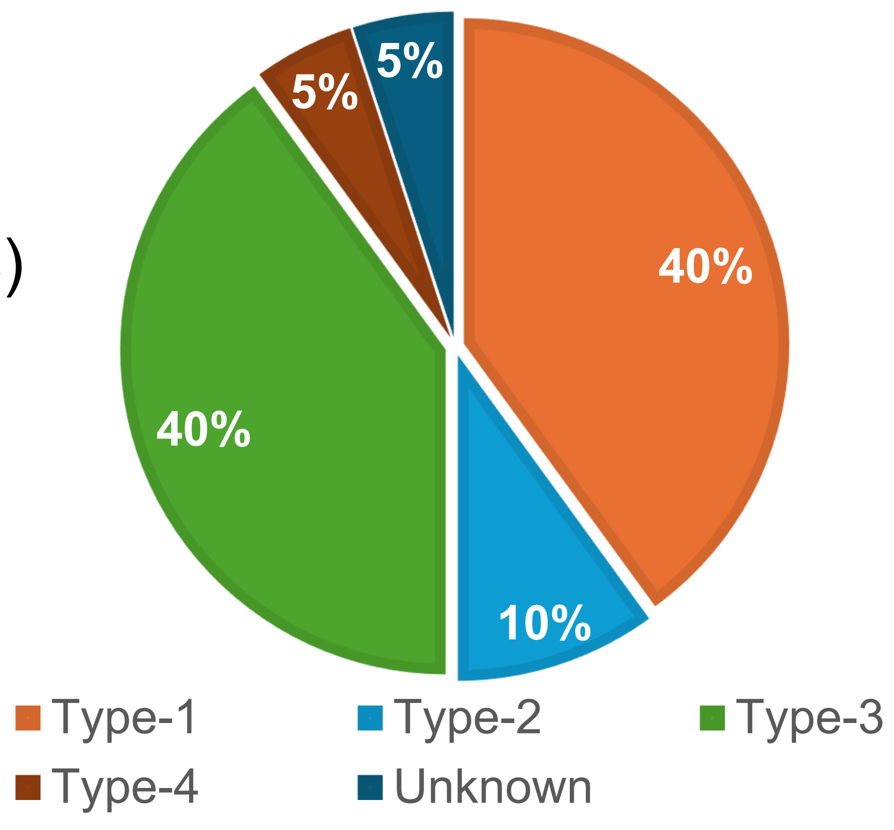

Figure 1: Hernia Type Distribution

Most Common Symptoms	n (%)
GERD Symptoms	12 (60%)*
Persistent Vomiting	9 (45%)
Insufficient Weight Gain	8 (40%)
Dysphagia	8 (40%)
Chronic Cough	6 (30%)
Recurrent Infections	4 (20%)

Diagnostic Approach	n (%)
Upper GI Contrast Series	12 (60%)*
Chest X-ray	4 (20%)
Thoracoabdominal CT	3 (15%)
Endoscopy	2 (10%)
pH-metry	1 (5%)
Abdominal Ultrasonography	1 (5%)

18 patients investigated for GERD
10 confirmed GERD (+)

Comorbidities	n (50%)
Cardiac anomalies	7 (35%)*
Genetic/syndromic	4 (20%)
Respiratory	4 (20%)

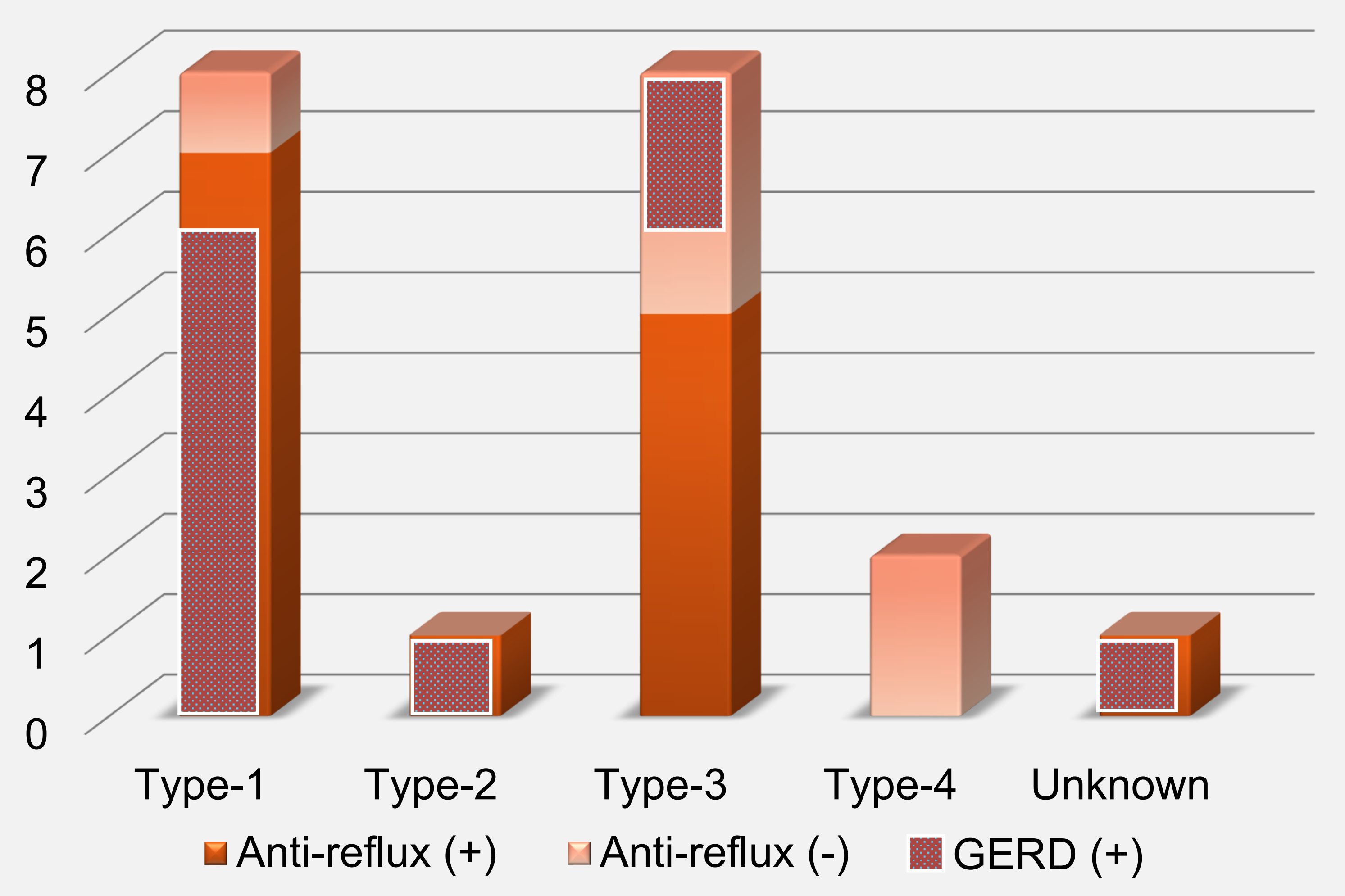

Figure 2. Distribution of Antireflux Surgery According to Hernia Types and GERD

All open procedures

Antireflux surgery: 70% (n=14)

→ Nissen fundoplication

GERD symptoms present: 83.3% received antireflux

GERD symptoms absent: 50% received antireflux

Postoperative Complications	13 (65%)
Recurrence	6 (30%)*
Peptic Stricture (Dilation)	5 (25%)
GERD Symptoms	4 (20%)
Persistent Vomiting	3 (15%)
Early Dumping Syndrome	3 (15%)
Wound Infection	2 (10%)
Late Dumping Syndrome	1 (5%)

Recurrence Ratio
Anti-reflux(+): 4/14 (%28.6)
Anti-reflux(-): 2/6 (%33.3)

Comorbidity(+): 4/10 (%40)
Comorbidity(-): 2/10 (%20)
(p>0.05)

Antireflux surgery does not alter postoperative outcomes (p>0.05)

RECURRENCE RISK FACTORS

Male gender (p=0.036)
Type-I CHH (50% recurrence)
Antireflux surgery: NO protective effect
Comorbidities: Not significant

CONCLUSION

High comorbidity rate in CHH
→ multidisciplinary approach needed

GERD symptoms influence
→ decision for antireflux surgery

Type I CHH in male patients: **HIGH recurrence risk**

Antireflux surgery **does NOT change** postoperative outcomes

REFERENCES

[1] Kaiser LR, Singal S. Diaphragm. In: Surgical Foundations: Essentials of Thoracic Surgery, Elsevier Mosby, Philadelphia, PA 2004. p.294.

[2] Wright RA, Hurwitz AL. Relationship of hiatal hernia to endoscopically proves reflux esophagitis. Dig Dis Sci 1979; 24:311