SEVERITY OF OBESITY DOES NOT IMPACT OUTCOMES FOLLOWING PARAESOPHAGEAL HERNIA REPAIR AND CONCURRENT BARIATRIC SURGERY

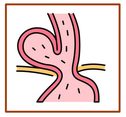
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UH RISES Research in Surgical Outcomes and Effectiveness

Case Western Reserve University EST. 1826

BACKGROUND



Incidence of **paraesophageal hernia (PEH)** in patients with **obesity** is **high.**



Common practice to repair incidental PEH at the time of bariatric surgery.



Prior studies → **no significant difference** in **major complications** between **isolated bariatric surgery** and **concurrent PEH repair**.



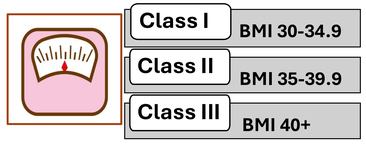
AIM: Examine the relationship between **severity of obesity** and **postoperative outcomes** in patients undergoing **concurrent PEH and bariatric surgery.**

METHODS

INCLUSION:
- Patients who had PEHR and Roux-En-Y or Gastric Sleeve
- Single-institution
- Retrospective: 2010 to 2020

EXCLUSION:
- BMI not recorded
- Non-elective surgery
- Previous PEH repair
- Age <18

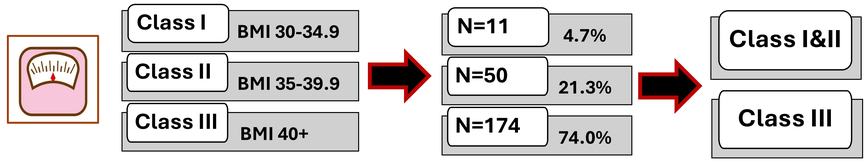
PATIENT GROUPS:
- ASMBS Obesity Class



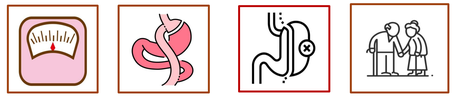
STATISTICAL ANALYSIS:
- Univariable: Chi-Square, Kruskal-Wallis
- Multivariable Logistic Regression

RESULTS

PATIENT GROUPS:



MULTIVARIABLE LOGISTIC REGRESSION MODELS:
- ***Model 1***: predicting **PEH recurrence**
- ***Model 2***: predicting **30-Day Complications**
- Independent Predictors: obesity class I&II versus class III, bariatric surgery type, age



Model 1: **No increased** odds of recurrence for **any predictors**

Model 2: Only **Roux-En-Y increased** odds of **30-Day complications** (OR 5.6, CI 1.6-19.7)

UNIVARIABLE ANALYSIS:
- Class III: younger age (p<0.001)
- Class I&II = Class III: sex, diabetes, smoking status, cardiovascular and pulmonary disease, previous abdominal surgery, Roux-En-Y or Gastric Sleeve
- >98% of patients had laparoscopic surgery

		Class I&II Obesity *Total=61* *N (%)*	Class III Obesity *Total=174* *N (%)*	*p-value*
30 Day Complications	*Yes*	5 (8.2%)	16 (9.2%)	*0.81*
PEH Recurrence	*Yes*	7 (11.5%)	12 (6.9%)	*0.32*
Postoperative GERD	*Yes*	9 (14.8%)	9 (5.2%)	*0.053*
Postoperative Dysphagia	*Yes*	3 (4.9%)	4 (2.3%)	*0.35*
Reoperation	*Yes*	2 (3.3%)	7 (4.0%)	*0.56*

CONCLUSIONS

Obesity severity does **not** impact **PEH recurrence, 30-day complications, reoperation** or postoperative **dysphagia** in patients undergoing concurrent PEH repair and bariatric surgery.

Patients with **Class III obesity** can **safely and effectively** be offered **concurrent bariatric surgery and PEH repair.**