# Pharmacological prophylactic protocol for prevention of postoperative nausea and vomiting after Endoscopic Sleeve Gastroplasty



#### Loredana Gualtieri

Department of Surgical Science "Umberto I" Hospital «Sapienza» University – Rome, Italy



#### **CONFLICT OF INTEREST DISCLOSURE**

No potential conflict of interest to report

#### **BACKGROUND**

# ENDOSCOPIC SLEEVE GASTROPLASTY

- **❖**REVERSIBLE
- **❖**MINIMALLY INVASIVE
- **❖**ENDOLUMINAL
- **❖**ORGAN SPARING





#### **BACKGROUND**

### THE LANCET

Login Q

Endoscopic sleeve gastroplasty for treatment of class 1 and 2 obesity (MERIT): a prospective, multicentre, randomised trial

Prof Barham K Abu Dayyeh, MD Readley C Thaemert, MD • et al. Show all authors

«ESG is a safe intervention that resulted in significant weight loss, maintained at 104 weeks, with important improvements in metabolic comorbidities. ESG should be considered as a synergistic weight loss intervention for patients with class 1 or class 2 obesity.»

Obesity Surgery (2021) 31:70–78 https://doi.org/10.1007/s11695-020-04915-4

Published: July 28, 2022 . DOI: https://doi.org/10.1016/S0140-6736(22)01280-6 .

**ORIGINAL CONTRIBUTIONS** 



#### **Brazilian Consensus on Endoscopic Sleeve Gastroplasty**

Manoel Galvão Neto <sup>1,2</sup> • Lyz Bezerra Silva <sup>3</sup> • Luiz Gustavo de Quadros <sup>2,4</sup> • Eduardo Grecco <sup>1,2</sup> • Admar Concon Filho <sup>2,5</sup> • Artagnan Menezes Barbosa de Amorim <sup>6</sup> • Marcelo Falcao de Santana <sup>7</sup> • Newton Teixeira dos Santos <sup>8</sup> • Joao Henrique Felicio de Lima <sup>9</sup> • Thiago Ferreira de Souza <sup>1,2</sup> • Helmut Wagner Poti de Morais <sup>10</sup> • Felipe Matz Vieira <sup>11</sup> • Rena Moon <sup>12</sup> • André F. Teixeira <sup>12</sup> • for the Brazilian Endoscopic Sleeve Gastroplasty Collaborative

Check for updates



Mean percentage total body weight loss (TBWL) of 18.2% in 1 year

#### **BACKGROUND**

Five-Year Outcomes of Endoscopic Sleeve Gastroplasty for the Treatment of Obesity

- ❖ Mild adverse events rate was: 32%
- \*\* «patients experienced nausea and vomiting: 19%»
- \* « 31.2% of patients reported postprocedure nausea »

# Efficacy and Safety of Endoscopic Sleeve Gastroplasty: A Systematic Review and Meta-Analysis

Abdellah Hedjoudje,\* Barham Abu Dayyeh,\* Lawrence J. Cheskin, Atif Adam, Manoel Galvão Neto, He Dilhana Badurdeen,\* Javier Graus Morales,\* Adrian Sartoretto, Gontrand Lopez Nava, Se Eric Vargas, Sui Zhixian, Lea Fayad,\* Jad Farha,\* Mouen A. Khashab,\* Anthony N. Kalloo,\* Aayed R. Alqahtani, He,\*\* Christopher Thompson, and Vivek Kumbhari\*

- \*\*«The pooled 95 post-ESG rate of severe adverse events was: 2.2% (95% CI, 1.6%—3.1%];»
- \*\*«nausea requiring hospitalization: n=18, 1.08%;»

#### AIM AND METHOD

# PRIMARY OUTCOME





- OTHER ADVERSE EVENTS

SECONDARY OUTCOME

WEIGHT LOSS RESULTS





#### AIM AND METHOD

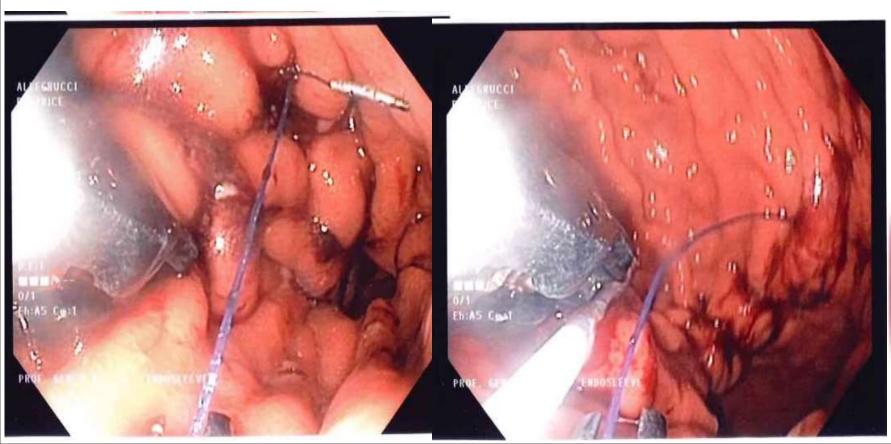
10 patients, aged 24 – 62, with a mean BMI of 35.8 kg/m<sup>2</sup>



were enrolled and submitted to

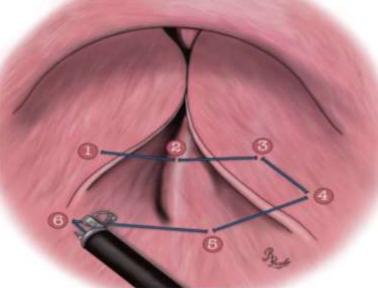


ENDOSCOPIC SLEEVE GASTROPLASTY



Follow-up: 6 months

**"U" PATTERN** 



#### AIM AND METHOD

# ANTIEMETIC PROTOCOL

> PRE-operatively
At least 1 hour
before procedure

i.v.150mg Fosaprepitant (Ivemend)

neurokinin 1 (NK1) receptor antagonist

serotonin 5-HT3

> INTRA-operateively

i.v. 0.15mg/kg ondasetron

receptor antagonist

i.v. 8mg dexamethasone

➤ POST-operatively every 12 hours for the next 24 hours

i.v.

8mg ondasetron

## RESULTS

## **ADVERSE EVENTS**

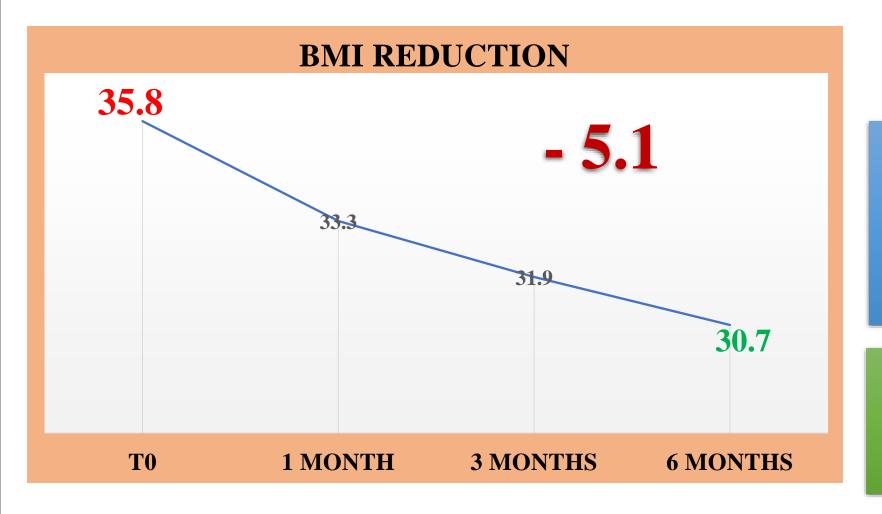


\*No patients experienced nausea or vomiting in the postoperative period.

**2/10** patients experienced mild epigastric pain treated with medical therapy.

# RESULTS

# WEIGHT LOSS OUTCOMES

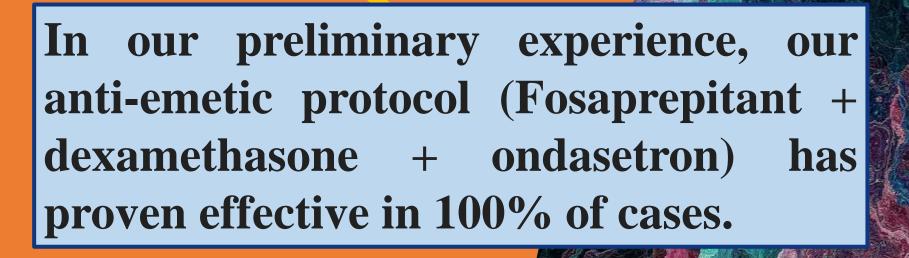




\*MEAN
%TBWL:
14.3

**\*MEAN %EWL: 55.7** 

# **CONCLUSION**



Endoscopic Sleeve Gastroplasty has been shown to be effective in terms of weight loss outcomes in short term.



THANK YOU