Early Recovery After Bariatric Procedures in an Ambulatory Surgery Center: The Role of Aprepitant on Postoperative Nausea and Vomiting (PONV).

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Introduction (1-5)

- **PONV** is common after **bariatric** laparoscopic and endoscopic **surgery** as well as a concerning symptom after **gastric balloon placement**.
- Evidence shows that the combination of **aprepitant** with corticosteroids and 5HT-3 receptor inhibitors **as antiemetic prophylaxis**, is effective in the reduction of **PONV** in the immediate and late bariatric **postoperative period** (POP).

➢ Main objectives:

- **Determine the effectiveness of prophylactic aprepitant monotherapy in preventing PONV at Post anesthesia Care Unit (PACU) discharge.**
- **Compare the effect of aprepitant combined with ondansetron vs ondansetron alone in reducing PONV at 24-48 hours Post anesthesia Care Unit (PACU) discharge.**

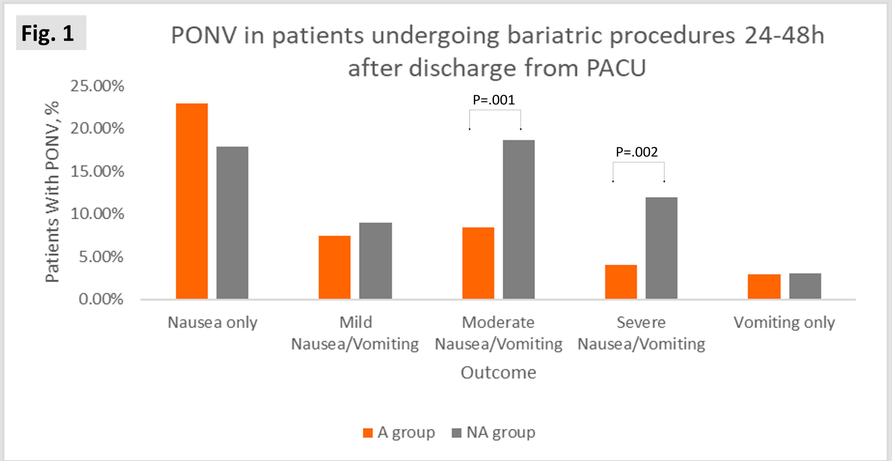
Methods

- Medical records of all patients undergoing laparoscopic or endoscopic bariatric surgery and gastric balloon placement were reviewed for PONV episodes during the first 48 postoperative hours from **January 1, 2022, to June 30, 2022**.
- A two-tailed p-value of <0.05 was considered statistically significant for this retrospective cohort study.

Results

- **335** eligible patients were included in the study: **201** patients received aprepitant (**A group**) and **134** did not (**NA group**). All of the patients were discharged home on the same day of surgery.
- Rates of **PONV** were **similar** between both groups at discharge from PACU **20.89% vs 20.14% (p = .86)** (Table 1).
- **92** patients from **A group** and **81** from **NA group** experienced **PONV** 24-48 hours after discharge from PACU **45.77% vs 60.44%** respectively (odds ratio [OR] [95% CI], **0.55 [0.35–0.86]; P = .008**) (Figure 1).
- The **Relative risk reduction** (RRR) in 24–48-hour POP **nausea** (regardless of presence of emesis) and **emesis** (regardless of presence of nausea) is **0.25 and 0.42**, respectively.

Fig. 1



Conclusions (6-10)

- **Preoperative** administration of **aprepitant** showed to be **effective in preventing moderate and severe PONV only** in the **late POP** during the **first 24-48** hours when its residual effect was **combined** with the administration of a 5HT-3R blocker (**ondansetron**) (Figure 1).
- The **similar rates** of **PONV** in the **immediate postoperative** period suggests that **bariatric surgery antiemetic prophylaxis** should be performed with the **combination of aprepitant** and **conventional antiemetic regimens**.

Table 1 PONV in patients undergoing bariatric procedures at discharge from PACU

	All patients (n=335)			
	Aprepitant use			
Outcome	Yes	No	OR (95% CI)	P value
Nausea only	31	22	0.94 (0.52-1.72)	0.86
Nausea and Vomiting	7	4	1.17 (0.33-4.12)	0.79
Vomiting only	4	1	2.69 (0.29-24.4)	0.37

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