Concomitant hiatal hernia repair during bariatric surgery does not require increased postoperative narcotic requirements in presence of exparel

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Background

- Evidence suggests liposomal bupivacaine (LB) reduces total inpatient narcotic requirements after bariatric surgery.
- However, there are no data evaluating whether concurrent hiatal hernia repair (HHR) reduces the efficacy of LB in this setting.
- The aim of this study was to determine whether there was a reduction in LB's efficacy in reducing narcotic requirements in postoperative bariatric surgery patients with concurrent HHR.

Aim

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Methods

- Patients undergoing primary bariatric surgery were divided into two groups, those who had not received LB, and those who had as part of an Enhanced Recovery After Surgery (ERAS) protocol.
- Within each group, a comparison between patients without and with concomitant HHR was made.
- The morphine milligram equivalent (MME) usage of each group was calculated and compared.

Results

- Out of a total of 247 patients, 141 underwent laparoscopic sleeve gastrectomy (LSG) and 106 underwent Roux-en-Y Gastric Bypass (RYGB).
- Among LSG, 43 (19 without HHR and 24 with HHR) did not receive post-operative LB compared to 98 (48 without and 50 with HHR) who did receive LB.
- Among RYGB, 40 (19 without HHR and 11 with HHR) did not receive post-operative LB compared to 76 (49 without HHR and 27 with HHR) who did received LB.

Table: Morphine Milligram Equivalent Requirements Stratified by Concomitant Hiatal Hernia Repair with and without liposomal bupivacaine

Surgery	Without liposomal bupivacaine			With liposomal bupivacaine		
	No HHR	HHR	p-value	No HHR	HHR	p-value
Laparoscopic Sleeve Gastrectomy – MME (mg)	79 (72.7)	100.8 (98.5)	p=0.42	31.1 (52.2)	35.1 (50.7)	p=0.70
Roux-en-Y Gastric Bypass – MME (mg)	113.7 (87.9)	77 (64.9)	p=0.24	19.6 (31.9)	16.6 (29.6)	p=0.69

MME: Morphine Milligram Equivalents. **HHR:** Hiatal Hernia Repair. Presented as mean (standard deviation).

Conclusions

- Among patients undergoing primary bariatric surgery, there were no significant differences in post-operative morphine milligram equivalent requirements between those with or without concomitant HHR in either the presence or absence of liposomal bupivacaine.