

## Introduction

- The intra-gastric balloons have been used for over 30 years to treat obesity around the world and have been approved in the US since 2015.
- Our objective was to survey intra-gastric balloon (IGB) placement and management patterns across the globe.

## Methods and Materials

A survey evaluating bariatric endoscopy practice patterns was distributed online via a digital platform to bariatric endoscopy practitioners, participants in virtual international seminars in bariatric endoscopy and in-person at the annual Association for Bariatric Endoscopy and Flexible Endoscopic Surgery meetings.

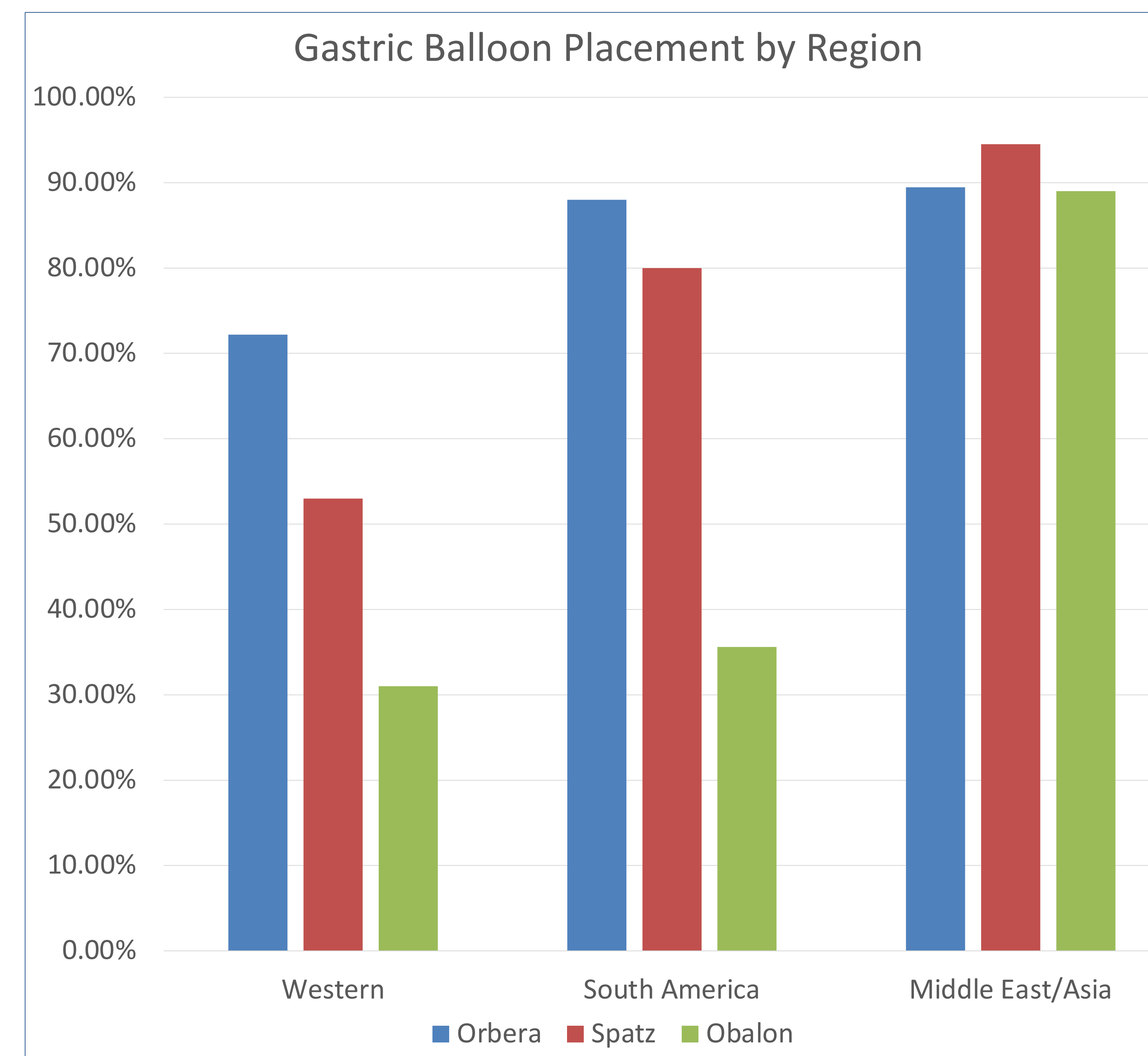
The survey consisted of three parts

- physician demographics (practicing specialty, type and location of practice),
- Types of bariatric procedures offered
- Practice patterns for IGBs placement/removal.

The main comparisons were among geographic areas (Western, Middle East and Asia, South America), private vs. academic, and surgical vs. gastroenterology practice, using Pearson chi-square test, with  $p < 0.05$  considered significant.

Variable	N (%)
<b>Specialty</b>	
Gastroenterology	79 (73.8%)
Surgery	25 (23.3%)
Obesity Medicine	3 (2.6%)
<b>Practice</b>	
Private practice	42 (37.2%)
Academic*	71 (62.8%)
<b>Region</b>	
Western**	30 (27.2%)
Middle East & Asia	39 (35.4%)
South America	41 (37.2%)
<b>Location</b>	
ASC	33 (50%)
Hospital	21 (31.8%)
N/A	12 (18.2%)
<b>Multidisciplinary team</b>	94 (87%)
Endoscopist	69 (19.2%)
Surgeon	66 (18.4%)
Registered Dietitian	83 (23.1%)
Psychologist	62 (17.3%)
Endocrinologist	31 (8.6%)
Social Worker	17 (4.7%)
Virtual	8 (2.2%)
Other	22 (6.1%)
<b>Team Size – Median [IQR]</b>	4 [1,5]
Abbreviations: ASC: Ambulatory surgery center; N/A not applicable	
*Including veteran affairs.	
** North America, Europe, Australia	

Table 1: Provider Demographics



## Results

- In total, 110 participants responded to the survey.
- From the total cohort, 79 (73.8%) were gastroenterologists, 25 (23.3%) were surgeons, and 3 (2.6%) participants were obesity medicine specialists.
- The majority were practicing in academic centers (62.8%) and performing procedures in ambulatory surgical center (ASC) settings (50%) with a median multidisciplinary team size of 4 providers (table 1).

## Discussion/Conclusion

- Most IGB procedures are performed by gastroenterologist, in academic centers, distributed equally across the globe.
- Variation exists in the type of anesthesia and timing of diet initiation following IGB placement, with no significant adverse events between them.
- Larger survey/registries and data are needed to inform best practice recommendations.

- Orbera (Apollo Endosurgery; Austin, TX, USA) was the most common type of balloon placed in South America and Western countries, while Spatz (Spatz FGIA; Great Neck, NY, USA); was placed more in the Middle East/Asia (figure 1).
- When comparing practice patterns for IGB placement/removal between gastroenterologist vs. surgeons; gastroenterologists were more likely to place and remove the devices under monitored anesthesia care (MAC) sedation without endotracheal intubation (ET) while surgeons were more likely use general anesthesia (GA) with ET 52% vs 25% and 17.9% vs 1%,  $p=0.0013$ ; respectively.
- Providers practicing in private practice were more likely to use conscious sedation and start a liquid diet sooner (1 week) compared to providers in academic centers, 60% vs 40%,  $p=0.03$  & 56% vs 40%  $p=0.0041$ , respectively.
- Providers in the South America and Western countries were more likely to use ET for placement/removal compared to those in the Middle East/Asia.

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