



Utilizing a Technique of Standardization to Reduce Cost and Complication Profile of Sleeve Gastrectomy



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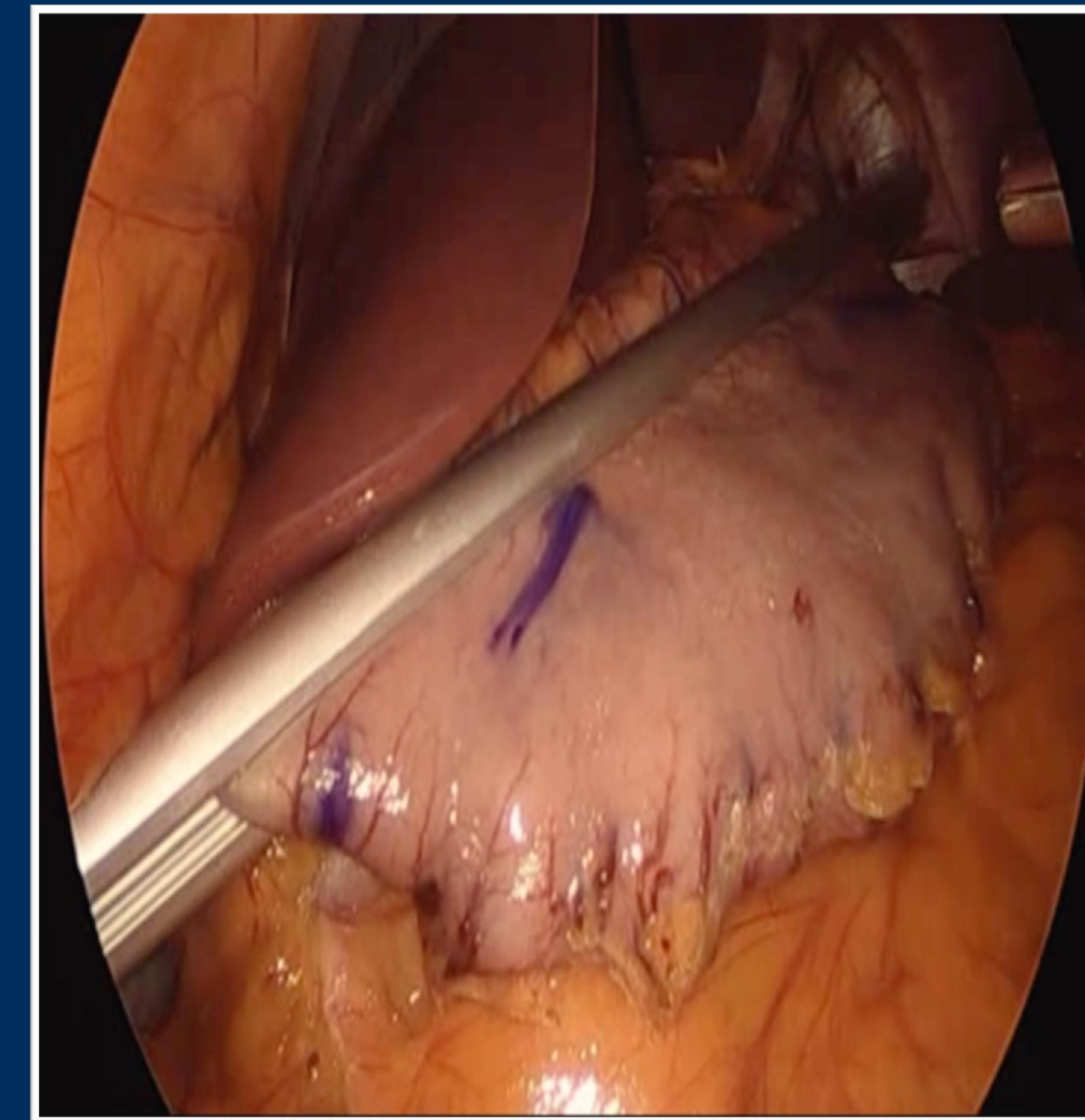
Objective:

Sleeve gastrectomy procedures now encompass approximately 60% of all bariatric surgeries. There are hundreds of variations on techniques aiming to create a straight gastric staple line in the floppy, stretchy, two-sided tissue of the stomach. This creates numerous potential pitfalls that may lead to complications ranging from strictures to spirals to complete obstruction. Other than the skill and clinical acumen of the surgeon, a tool does not exist to aid in standardizing the technique of these procedures and thereby help minimize the cost and risk of potential complications.

Methods:

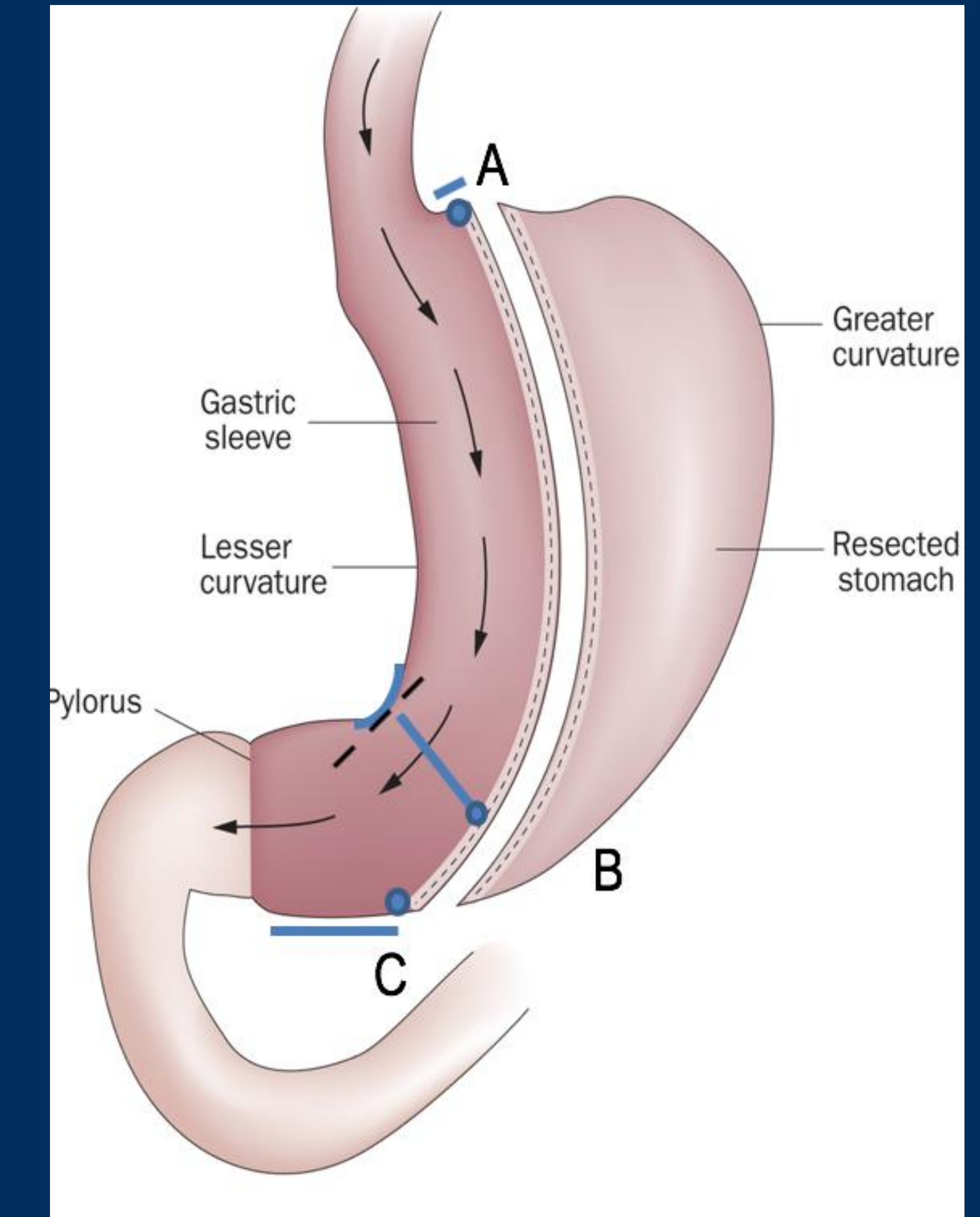
Utilizing our internal practice database and EMR, clinical data were obtained for our subset of patients who underwent a sleeve gastrectomy from August 2017 to March 2018. An analysis was performed comparing the procedures utilizing the Standard Clamp to the procedures utilizing our standard bougie. The data obtained were number of loads used per case and complications associated with the staple line (i.e. leak, bleed, or obstruction). Our results indicate a consistently shaped sleeve utilizing fewer staple loads with no additional morbidity related to the staple line.

	n	Avg. # Loads	Leak	Bleed	Obstruction
Standard Clamp	26	3.95	0	0	0
Bougie	21	5.25	0	0	0



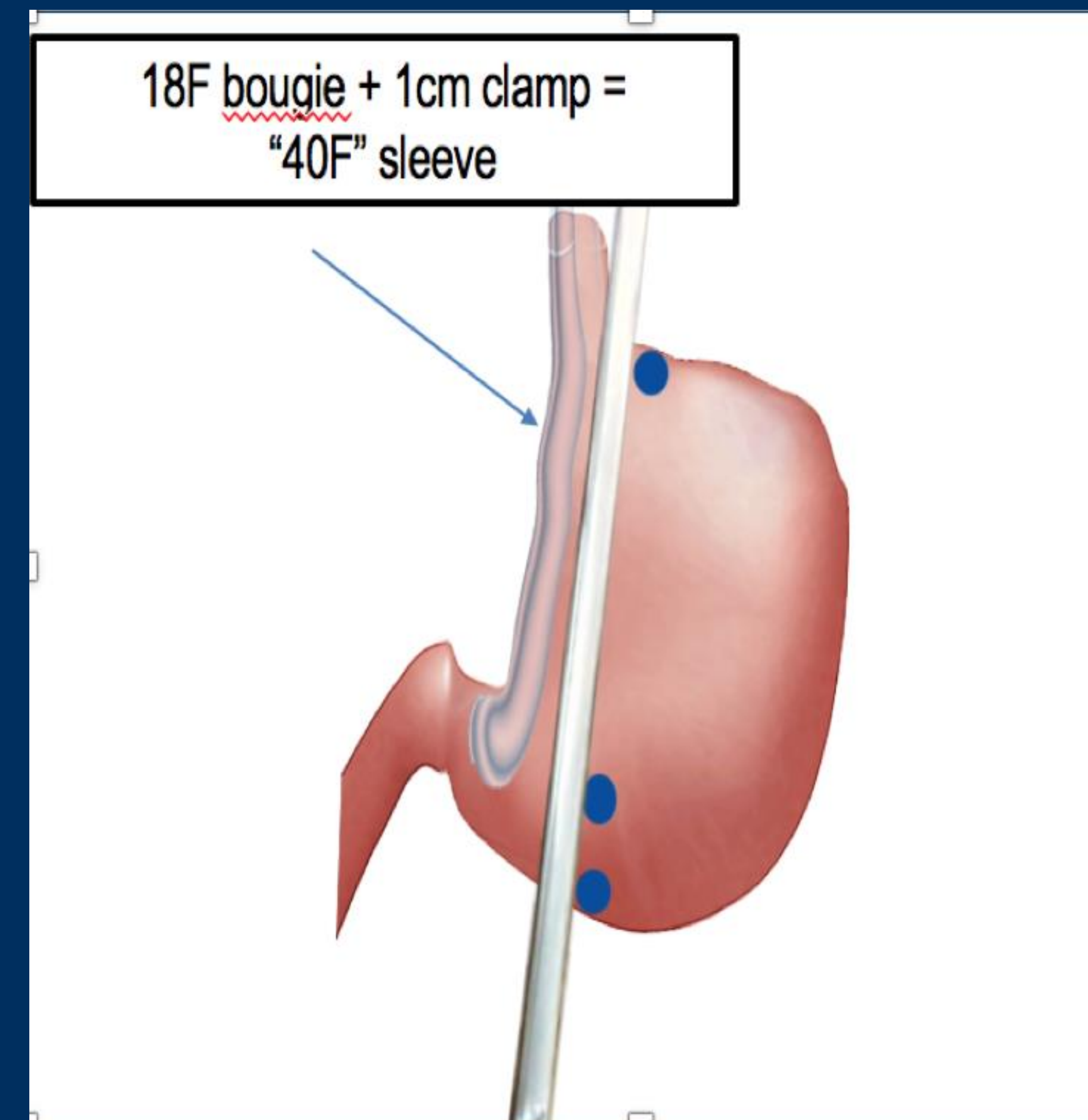
Description:

The Standard Clamp is a 10 mm laparoscopic device that when used with a 16-18 French nasogastric tube can create a 36-40 French sleeve. The device's goal is to allow placement of a series of short staple cartridges on the stomach in a continuous line, in the same plane achieving a consistent shape while ensuring safe distances from key landmarks. In doing so, it will ensure the staple line has no twists, spirals, strictures, or kinks all of which can lead to obstruction. Finally, holding the stomach firm in a straight line allows for fewer staple cartridges being required, thereby potentially decreasing the overall cost of the procedure.



Anatomy- Based Sleeve Gastrectomy

- A. 1cm from the gastroesophageal junction
- B. 3cm from the incisura angularis
- C. 3-5cm from the pylorus



Safe Sleeve Gastrectomy Principles

1. Ensure complete dissection of the stomach.
2. Ensure a complete resection of the fundus.
3. Ensure lumen is not narrowed at the incisura angularis.
4. Ensure staple line is 1-2cm from GE junction at the top of staple line.
5. Ensure final fire is "squared off".
6. Ensure staple line has no twists or spirals by including equal amounts of anterior and posterior stomach.

Conclusions/Future Directions:

The use of the Standard Clamp in sleeve gastrectomy procedures allows for a straighter sleeve, fewer staple loads, and the potential for fewer complications. The use of this device will also help pave the way for the future of a full-length sleeve gastrectomy stapler. Increasing the utilization of this device has the potential to decrease the cost and increase the safety and efficacy of our most common bariatric procedures.