



Sliding and self-locking and Aberdeen knot in Iaparoscopic bariatric sutures. Video Aniceto Baltasar, Carlos Serra, Rafael Bou, Marcelo Bengochea, Nieves Pérez

### SPECIAL ARTICLE (English version)

# Sliding and self-locking and Aberdeen knot in laparoscopic bariatric sutures. Video

## Anudado deslizante con autobloqueo y de Aberdeen en las suturas bariátricas laparoscópicas. Video

Aniceto Baltasar, Carlos Serra, Rafael Bou, Marcelo Bengochea, Nieves Pérez

Hospital Comarcal y Clínica San Jorge de Alcoy. España

\* Autor para correspondencia. Correo electrónico: <u>baltasarani@gmail.com</u> (Aniceto Baltasar).

Recibido el 19 de actubre de 2019; aceptado el 7 de diciembre de 2019.

#### How to cite this paper:

Baltasar A, Serra C, Bou R, Bengochea M, Pérez N. Sliding and self-locking and Aberdeen knot in laparoscopic bariatric sutures. Video. JONNPR. 2020;5(5):473-77. DOI: 10.19230/jonnpr.3323 Cómo citar este artículo:

Baltasar A, Serra C, Bou R, Bengochea M, Pérez N. Anudado deslizante con autobloqueo y de Aberdeen en las suturas bariátricas laparoscópicas. Video. JONNPR. 2020;5(5):473-77. DOI: 10.19230/jonnpr.3323



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License La revista no cobra tasas por el envío de trabajos, ni tampoco cuotas por la publicación de sus artículos.

The reinforcement of the suture line of staples can be made with different materials. In our institution, we have a vast experience of patients operated with duodenal crossover (CD) and laparoscopic vertical gastrectomy (LVG). We use a 12 mm intragastric probe as a guide and we vascularize all the major curvature passing 1.5 cm distal pylorus.

We initiate pylorus gastrectomy with sequential staplers up to the esophago-gastric junction. We routinely try to prevent hemorrhages and leaks in the staple line with a reinforcement suture that includes the epiplon, the posterior gastric wall and then the anterior one along the entire length of the gastric staple line. The objective of using the already divided epiplon together with the suture line is to avoid rotation of the gastric tube.

Knotting in this upper part of the gastric tube is not an especially easy task for the morbid obese. The instrument nurse (Figures 1 and 2) creates a sliding knot at the end of the





Sliding and self-locking and Aberdeen knot in Iaparoscopic bariatric sutures. Video Aniceto Baltasar, Carlos Serra, Rafael Bou, Marcelo Bengochea, Nieves Pérez

3/0 polypropylene suture, with a double extracorporeal loop to avoid the need for an intracorporeal knot.



Figure 1. Port 1 is 12 mm and is the "working" port



Figure 2. The scrub nurse makes the sliding knot





Sliding and self-locking and Aberdeen knot in laparoscopic bariatric sutures. Video Aniceto Baltasar, Carlos Serra, Rafael Bou, Marcelo Bengochea, Nieves Pérez

The surgeon clamps and holds the thread very close to the needle with his left hand and introduces it into the abdomen by means of a trocar of 10 (Figure 3). Once in the abdomen, with the needle holder of the right hand, he holds the needle in the center and begins the suture of both gastric walls. Simply pull the thread to complete the first knot. The procedure is quick and easy, without having to knot in the abdomen.



Figure 3. The needle-holder grabs the thread close to the needle

This first suture of the staple line is continued until the middle of the line and ends with the application of the Aberdeen knot, also self-sliding, by passing the needle holder around the tension suture twice.

The second part of the suture line is similar, and begins in the middle of the staple line, until ending in pylorus. The purpose of using this sliding self-locking knot at the beginning of the suture line is to avoid intra-corporeal knotting. Aberdeen knotting at the end of both sutures is also very simple and has the same sliding effect.





Sliding and self-locking and Aberdeen knot in Iaparoscopic bariatric sutures. Video Aniceto Baltasar, Carlos Serra, Rafael Bou, Marcelo Bengochea, Nieves Pérez

## Discussion

To date, there are no data available in the literature that strongly demonstrate differences in terms of leakage rates between reinforcing materials in the GVL <sup>(1-5)</sup>. But with this technique we have not had a single leak in the last 478 suture lines. And we have continued to routinely use the self-blocking knot to initiate all the sutures of the laparoscopic digestive and is topped with the Aberdeen knot. Daes <sup>(5)</sup> is the first to describe this knotting in 2013 and we add <sup>(6,7)</sup> the plastia of the epiplon to the rest of the line of staples to avoid torsion of the gastric tube. Other authors have continued to use it <sup>(8,9)</sup>.

See video https://youtu.be/mh5gDPF5zhg

## Referencias

- 1. Deitel M, Crosby RD, Gagner M. The First International Consensus Summit for Sleeve Gastrectomy. New York City, October 25–27, 2007. Obes Surg.2008; 9:87–96.
- 2. Gagner M, Deitel M, Kalberer TL, et al. The Second International Consensus Summit for Sleeve Gastrectomy.March19–21,2009. Surg Obes Relat Dis. 2009; 5:476–85.
- Deitel M, Gagner M, Erickson AL, et al. Third International Summit: Current status of sleeve gastrectomy. Surg Obes Relat Dis. 2011;7: 749–59.
- Rosenthal RJ. For the International Sleeve Gastrectomy Expert Panel. International Sleeve Gastrectomy Expert Panel Consensus Statement: Best practice guidelines based on experience of >12,000 cases. Surg Obes Relat Dis. 2012; 8:8–19.
- 5. Daes J. Self-locking first stitch in suture reinforcement of the laparoscopic gastric sleeve. Obes Surg.2013; 23:795–5.doi:10.1007/s11695013-0941-z.
- 6. Serra C, Baltasar A, Andreo L, et al. Treatment of gastric leaks with coated selfexpanding stents after sleeve gastrectomy. Obes Surg. 2014; 24:1739-1740
- Baltasar A, Bou R, Serra C, Bengochea M, Perez N.: (2015) Use of self-locking knots in running intestinal bariatric sutures. Global surgery, 2015;.2: 100-101. doi: 10.15761/GOS.1000132





Sliding and self-locking and Aberdeen knot in laparoscopic bariatric sutures. Video Aniceto Baltasar, Carlos Serra, Rafael Bou, Marcelo Bengochea, Nieves Pérez

- 8. Albanopoulos K, Flessas I, Zografos G, et al. Self-locking first stitch in suture reinforcement of the laparoscopic gastric Sleeve. Obes Surg. 2013; 23:796–7. doi:10.1007/s11695-013-0943-x.
- Stott PM, Ripley LG, Lavelle MA. The ultimate Aberdeen Knot. Ann R Coll Surg Engl. 2007; 89:713–7. doi:10.1308/003588407X205468.