



Video of the month

Hiatoplasty with running barbed suture: An alternative to conventional hiatal closure

Hiatoplastia con sutura continua barbada: una alternativa al cierre de pilares convencional

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Objective

In large hiatal hernias associated with extensive diaphragmatic defects, closure of the hiatus is a technically complex procedure. Due to the diameter of the hiatal gap and the anatomical

situation of the pillars, it can be difficult to bring the crura together, which becomes more complex in obese patients. It is essential to preserve the structure of the pillars to the greatest extent possible for a solid closure. In many cases, the required tension of the suture or the difficult anatomy do not make a firm juxtaposition of both structures possible, which is confirmed by

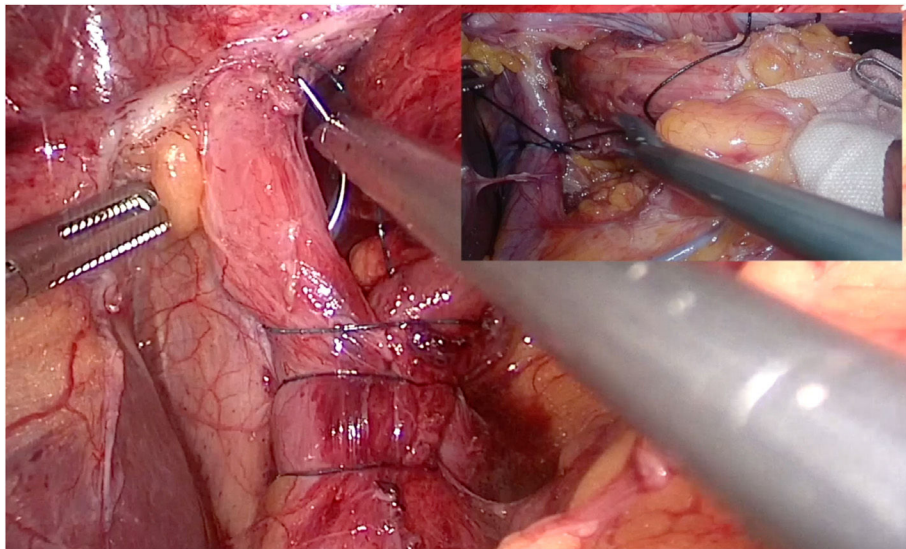


Figure 1

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a high percentage of recurrences. Various options have been proposed to perform this type of closure: simple interrupted stitches, x-sutures, the use of pledgets (synthetic mesh or Teflon), as well as different types of suture material (silk, non-absorbable multifilament or monofilament). In recent years, the use of barbed sutures in digestive surgery has spread, but its systematic use for the closure of diaphragmatic pillars is not yet widely generalized (Fig. 1).

Methods

We present several video clips showing the closure of the pillars (hiatoplasty) using interrupted x-stitches with non-absorbable material and continuous non-absorbable barbed suture (V-LocTM), in patients undergoing laparoscopic paraesophageal hiatal hernia repair.

Results

Due to its design characteristics, barbed suture enables us to perform a continuous suture with progressive apposition of

the pillars, with less possibility of traction and countertraction because the barbs prevent loosening. This could result in a shorter surgical procedure and likely adequate preservation of the anatomical structure of the pillars.

Conclusions

However, the possible impact of this technical option on hernia recurrence has not been investigated in a controlled manner.

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.cireng.2023.03.008>.