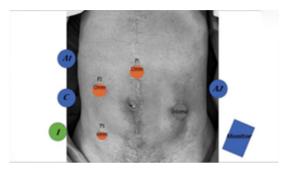
## Reveral Of Hartmann's Procedure by Laparoscopic Approach 🗃

Álvaro Lavega, Emilia Cerchiari, Isabel Gabito, Alejandra Liz, Gonzalo Gayo, Diego Lapiedra, Marcelo Viola Unidad de Coloproctología, Clínica Quirúrgica "1", Hospital Pasteur Prof. Dr. Fernando González Calcagno. Montevideo, Uruguay.



## ABSTRACT

Introduction: The Hartmann's procedure is one of the most frequently performed surgeries for an occlusive or perforative complication of the left colon, allowing the clinical picture to be resolved. The percentage of restitution of intestinal transit is very low, on average less than 50%. This is due to factors specific to the patient, the morbidity and mortality of the surgery, and technical difficulties. Restoring intestinal transit after a Hartmann procedure can be a very hostile surgery. It has its own non-negligible morbidity and mortality, regardless of the approach used. Laparoscopic reversal is one of the most complex procedures to be performed using this approach. But several studies have shown that although this technique requires a longer learning curve and a high level of technical dexterity, it has better results than the laparotomic approach. Case description: We present the clinical case of a 65-year-old man, who underwent a Hartmann's procedure a year ago for diverticular purulent peritonitis. A laparoscopic reconstruction of intestinal transit was decided. Patient in supine position, Trendelenburg 30° and lateralized to the right. The pneumoperitoneum up to 12 mmHg by open technique in the right flank was established through a 12 mm port for the camera and then for the surgeon's left hand. Another 6 mm port was placed in the right iliac fossa for the surgeon's right hand and a 12 mm supraumbilical one for the camera. After identification of the rectal stump in the pelvis, the stoma was circumferentially released and a pursestring with polypropylene 2-0 was made. The anvil of a 29 mm circular stapled device was placed in the colonic end, and then reintroduce into the abdomen. Twoplane parietal closure and reinstallation of the pneumoperitoneum were performed. The transrectal stapled suture was placed through the anterior aspect of the rectal stump, making the end-to-side colorectal anastomosis. The hydropneumatic test was negative. The patient had a postoperative period without complications, being discharged 72 h after the procedure, tolerating oral diet, without pain, without fever, and after passing stool.

**Conclusions:** Hartmann's surgery continues to be one of the most performed procedures to treat perforative and occlusive complications of the left colon and rectum. The restitution of intestinal transit after this surgery is not carried out in a very high percentage of cases for different reasons. Mininvasive surgery requires a long learning curve and high-level dexterity, but several studies show that the Hartmann's reversal has better results by this approach.

Key words: Hartmann's Procedure; Laparoscopic Surgery; Minimally Invasive Surgery; Hartmann'S Reversal

## REFERENCES

- Hallam S, Mothe BS, Tirumulaju R. Hartmann's procedure, reversal and rate of stoma-free survival. Ann R Coll Surg Engl 2018;100:301-07.
- Horesh N, Lessing Y, Rudnicki Y, et al. Considerations for Hartmann's reversal and Hartmann's reversal outcomes-a multicenter study. Int J Colorectal Dis 2017;32:1577-82.
- 3. Melkonian E, Heine C, Contreras D, et al. Reversal of the Hartmann's procedure: A comparative study of laparoscopic versus

The authors declare the absence of conflicts of interest. Marcelo Viola mviolam@gmail.com

Received: September, 2020. Accepted: October, 2020.

open surgery. J Minim Access Surg 2017;13:47-50.

- Resio BJ, Jean R, Chiu AS, Pei KY. Association of timing of colostomy reversal with outcomes following hartmann procedure for diverticulitis. JAMA Surg 2019;154:218-24.
- Park W, Park WC, Kim KY, Lee SY. Efficacy and safety of laparoscopic hartmann colostomy reversal. Ann Coloproctol 2018;34:306-11.

## COMMENT

The case presented about the reversal of the Hartmann's operation by laparoscopy is interesting. This surgery essentially represents a challenge for the surgical team, regardless of the type of approach selected. It is a fact that laparoscopic surgery has substantially reduced morbidity in colorectal surgery, but an adequate selection of patients is important to minimize the complications inherent to the method. Reversal of Hartmann's operation by this approach requires extensive experience in laparoscopic surgery of the surgical team. On the other hand, among the factors on which the selection of patients for this approach depends, it is worth highlighting the time elapsed between the initial surgery and the reversal, the type of pathology that gave rise to the procedure (benign or malignant), previous surgeries and coexisting parietal defects, among others.

Regarding the technique used, it is important to perform a laparoscopic approach prior to the release of the ostoma, since it allows anticipating the feasibility of adequate adhesiolysis and identification of the rectal stump, that provide the conditions for making a technically adequate anastomosis.

María Florencia Ventura Clínica Bazterrica. CABA, Argentina.