Video

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Laparoscopic management of a diverticular perforation in a patient with colovesical fistula

<https://www.youtube.com/watch?v=FFqdi0Gc5v0>

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The authors declare no conflicts of interest.

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ABSTRACT

**Introduction:** Diverticular disease is a frequent reason for consultation in the colorectal surgery consultation and can manifest itself in various ways, either as repeated episodes of abdominal pain, or due to some complication such as fistulas, digestive bleeding, etc. The most common fistula is between the colon and the bladder, and its resolution is a challenge for the surgeon, since the disease must be treated at the colonic and bladder levels. On the other hand, intestinal perforation secondary to diverticular disease also usually represents a surgical emergency that can threaten the patient's life. Infrequently, these two complications can coexist. Surgical resolution can be performed by conventional or laparoscopic approach, the latter probably beneficial for the postoperative period.

**Description:** A 65-year-old male with recurrent urinary tract infections due to colovesical fistula of diverticular origin in surgical plan, attended the emergency room 2 weeks before the date of surgery due to symptoms of acute abdominal pain. Diagnosis of intestinal perforation with hemodynamic instability secondary to the underlying disease is made. Exploratory laparoscopy revealed peritonitis located in the left paracolic space, interloop abscess, adhesions of the small intestine to the inflammatory sigmoid tumor, and the previously diagnosed colovesical fistula.

The video shows the minimally invasive surgical resolution using a Hartmann´s procedure for the risk of prolonging the surgical time due to the patient's hemodynamic status. The postoperative period was uneventful.

**Conclusion:** This approach should be chosen in the emergency setting if the general condition of the patient allows it and when the appropriate instruments and an experienced surgical team are available.

**Keywords:** Diverticular disease; Diverticulitis; Colovesical Fistula; Perforation; Laparoscopy

COMMENT

Minimally invasive surgical management of diverticular disease complicated by perforation or colovesical fistula is a challenge for the surgeon. The simultaneous presentation of these two complications is very infrequent and the authors show their treatment with a laparoscopic approach in the published video.

Elective surgical treatment with laparoscopic approach of colovesical fistula is currently standard in experienced surgical teams. In the case of diverticular perforation, the variables that influence the tactics and surgical approach are multiple. It is worth mentioning in the first place, the hemodynamic status of the patient beyond the type of peritonitis found. On the other hand, the experience of the surgical team must be considered, as well as the resources that the health center has in instruments and for the follow-up of these patients.

The video is of interest due to the infrequent presentation of diverticular disease, as well as the description of the aforementioned variables that must be taken into account when choosing the surgical procedure.

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