







# Conservative management of burst abdomen after interval cytoreduction surgery of ovarian carcinosarcoma

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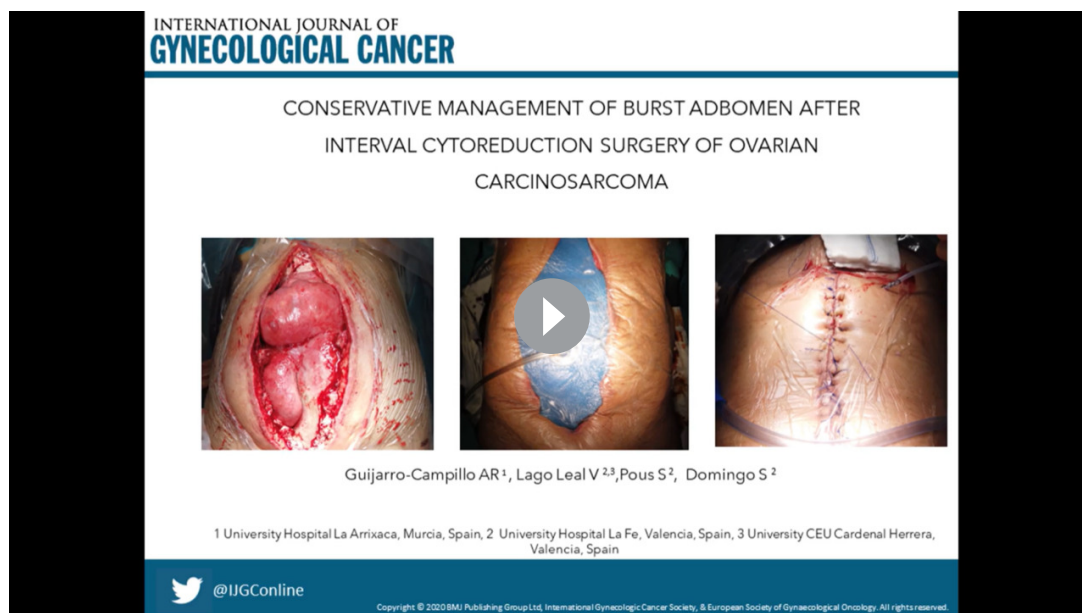
## HIGHLIGHTS

- ⇒ Laparotomy is a common procedure in patients with extended carcinomatosis disease.
- ⇒ Burst abdomen is an uncommon complication in midline laparotomies (0.2% to 5% after elective surgery and 8.5% to 45% after emergency surgery). This scenario is associated with increased morbidity and mortality rates up to 30%.
- ⇒ Conservative management with temporary abdominal closure with negative-pressure wound therapy: allows the patient to be resuscitated and gives time to improve their general condition, to both protect the viscera and prevent the lateral retraction leading to loss of abdominal domain; and allows the decision on the definitive surgical procedure to be postponed to a follow-up examination in an elective scenario (avoiding a temporary stoma in case of suspicious anastomotic leakage).
- ⇒ For surgeons of patients with advanced abdominal disease, knowledge and management of the abdominal wall and its complications must have a relevant place.

Laparotomy is a common procedure in patients with extended carcinomatosis disease. A burst abdomen is an exceptional complication in midline laparotomies, reported in 0.2% to 5%<sup>1</sup> after elective surgery and 8.5% to 45%<sup>2</sup> after emergency surgery. This scenario

is associated with increased morbidity<sup>3</sup> and mortality rates up to 30%.<sup>1</sup>

We report a female patient in her 70s with carcinosarcoma (carcinosarcoma) of ovarian origin, who underwent interval cytoreduction surgery. She was

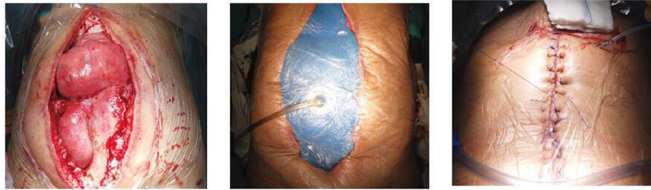


**Video 1** Burst abdomen evolution after conservative management with a total abdominal wall final closure. NPWT, negative pressure wound therapy; CT, computed tomography; DG LPS, diagnostic laparoscopy; HGOSC: high grade ovarian serous carcinoma; CR, cytoreduction; CRS, chemotherapy response score; POD: postoperative day.



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**Figure 1** Burst abdomen evolution after conservative management with a total abdominal wall final closure.

readmitted after hypoproteinemia, sarcopenia, and deterioration of her general condition, where there was evidence of severe dehiscence of the laparotomy wound presenting a burst abdomen (Figure 1 and Video 1)

We show a conservative management option using negative pressure wound therapy (NPWT) with the addition of chemical relaxation with botulinum toxin A, achieving total closure of the abdominal wall with partial fascia closure. Botulinum toxin A temporarily paralyzes the oblique abdominal muscles allowing medialization of the rectus sheath and decreasing tension on the abdominal wound closure.<sup>2</sup>

This conservative option with NPWT is feasible and safe in patients with peritonitis secondary to an anastomotic leak.<sup>1</sup>

The management of this complication is a relatively unexplored area within the field of surgery.<sup>3 4</sup> In these scenarios NPWT is a tool to be considered for its resolution. For surgeons of patients with advanced abdominal disease, knowledge and management of the abdominal wall and its complications must have a relevant place.

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