Ghost ileostomy: prevention, diagnosis, and early treatment of colorectal anastomosis leakage in advanced ovarian cancer

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In ovarian cancer, modified posterior pelvic exenteration and end-to-end colorectal anastomosis are usually necessary to achieve optimal cytoreduction. Anastomotic leak ranges from 1.7% to 6.8%, and is the main life-threatening scenario after colorectal anastomosis. It has been associated with an increase in morbidity and mortality rates, days of hospitalization, and chemotherapy delays.

With regard to the management after colorectal anastomosis, ghost ileostomy has been shown to be a good approach to reduce the rate of protective stoma. The use of ghost ileostomy in conjunction with close post-operative monitoring (C-reactive protein, procalcitonin, and rectoscopy) allows early and sub-clinical diagnosis of leakage. It can be easily converted into a diverting ileostomy if an anastomotic leakage is suspected, and only requires the loop removal for reversal. During the conversion into a diverting ileostomy it also allows a wash-up of the abdominal cavity to be done and the placement of a percutaneous drainage if indicated. Consequently, ghost ileostomy avoids the disadvantages associated with stoma such as dehydration, malnutrition, renal failure, prolapse, or stricture. Additionally, it also avoids the impact on self-image and quality of life associated with stoma.

We present a case in which end-to-end colorectal anastomosis was performed due to an advanced...
ovarian cancer. A protective ghost ileostomy was performed as follows: a portion of terminal ileum 20 cm distant from the ileocecal valve was identified, the afferent and efferent portions were marked with a long and short stitch, and a vessel loop was placed from the mesenteric border to the abdominal wall at the point of the theoretical stoma.\(^2\)\(^3\)

Post-operatively, C-reactive protein and procalcitonin serum levels were monitored on post-operative days 1 and 3, followed by a low pressure rectoscopy on day 4.\(^1\) Based on normal results, the patient started solid intake. At first defecation she had a sudden clinical worsening and an anastomotic leak was suspected. C-reactive protein and procalcitonin were measured and had risen from basal levels, and a sequential rectoscopy and a computed tomography-enterography showed an anastomotic leakage. Therefore, the ghost ileostomy was converted into a diverting ileostomy at an early clinical stage before fecal peritonitis was established and without re-laparotomy.

Ghost ileostomy represents a real option for tailoring the number of diverting ileostomies performed without increasing the morbidity and mortality. It is a reproducible, safe, and low-cost technique.\(^3\)\(^4\)

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