Perioperative ovarian cancer management: management of bowel related morbidity, prophylactic stoma formation, and stoma reversal

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Biography: Christina Fotopoulou is the Professor of Gynaecological Cancer Surgery in the Department of Surgery and Cancer, Faculty of Medicine of Imperial College London, UK. She is the Deputy director of the Ovarian Cancer Action Research Centre at Imperial College. She holds an honorary chair in the Gynaecology Department at the Charite' University of Berlin, where she was trained and then later took the role of the Vice Director of the Gynecological Department. Her surgical and scientific expertise focuses on the management of patients with advanced and relapsed ovarian cancer, profiling of tumor heterogeneity and integration of tumor biolog factors with surgical effort under the umbrella of individualization of surgical care. She has served as the Chair of the guidelines committees of the British Gynaecological Cancer Society (BGCS) and of ESGO (European Society of Gynaecologic Oncology). She has been an elected member of the ESGO Council and is also a member of the German AGO-Ovarian Cancer Group. She is on the editorial board and reviewer of numerous international gynaecological and oncological journals and is member of various international oncological committees, including BGCS, ASCO, ESGO, IGCS, ESMO, ENGOT, AGO, SGO and NOGGO.

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Anastomotic complications, especially anastomotic leaks, belong to the most challenging aspects of surgical morbidity in cytoreductive procedures that involve colorectal resections (Figure 1). With an average rate of 6% of anastomotic leak [1], early recognition and efficient management are crucial to minimize mortality and morbidity and to avoid a compromise of the overall oncologic outcome.[2] The following risk factors have been recognized in multiple series as being significantly associated with a higher anastomotic leak: advanced patient age, multiple bowel resections, low preoperative albumin serum levels, and a short distance from the anastomosis

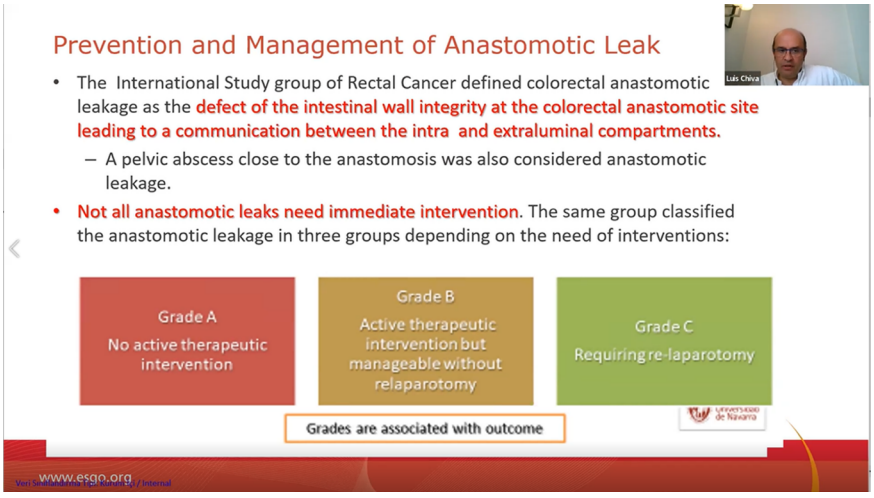
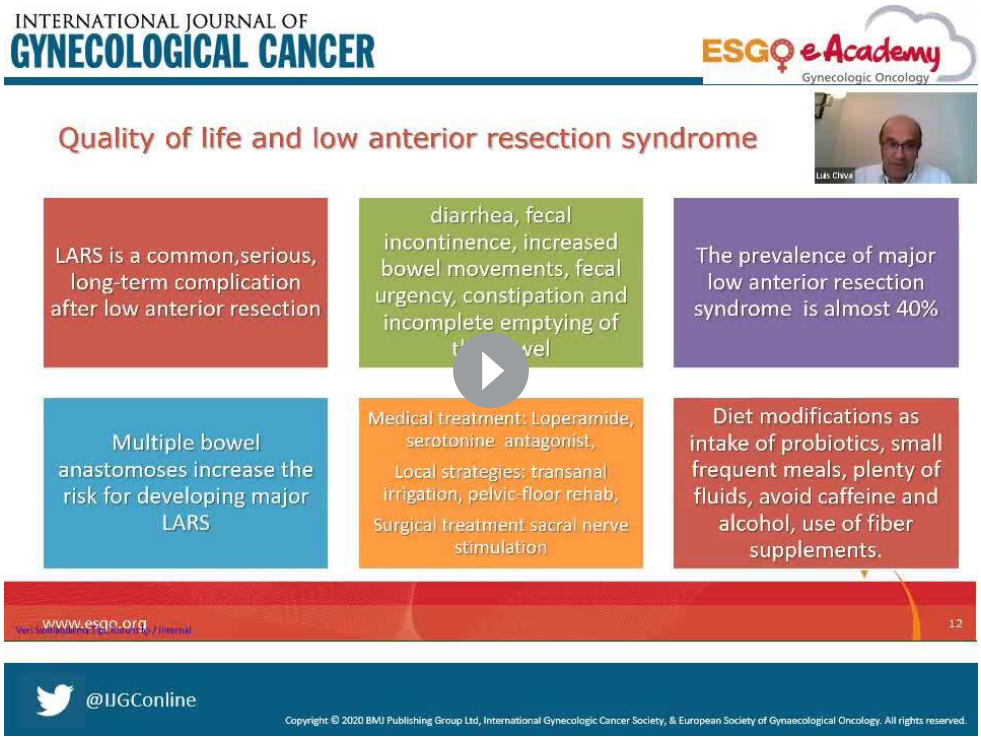


Figure 1 Robust classification systems and evidence-based management algorithms are now established to help gynecological oncologists support and treat ovarian cancer patients with colorectal complications from radical cytoreductive procedures



Video 1 Robust classification systems and evidence-based management algorithms are now established to help gynecological oncologists support and treat ovarian cancer patients with colorectal complications from radical cytoreductive procedures. LARS, low anterior resection syndrome.

to the anal verge.[3] A meticulous surgical technique, careful tissue handling, and adequate mobilization to achieve tension-free anastomosis without compromising the vascular supply of the anastomotic ends are keys to success.[4] Nevertheless, not all anastomotic leaks require immediate surgical intervention.[5] The International Study Group of Rectal Cancer has defined a classification system for leaks depending on the need for intervention: grade A, no active therapeutic intervention needed; grade B, active therapeutic intervention needed but manageable without re-laparotomy; and grade C, re-laparotomy required (Video 1).

The diagnostic imaging tool of choice is computed tomography (CT) of the abdomen and pelvis. Extraluminal contrast, free perianastomotic air, and a disrupted staple line are typical radiological signs of an anastomotic leak. Nevertheless, a negative CT does not rule out a leak and may worsen the outcome of an undiagnosed leak or perforation. For that reason, clinical decision-making algorithms should be based on the entire clinical and biochemical picture of the patient and not just on imaging alone. Unstable patients with sepsis and an acute abdomen should be managed rapidly to avoid potentiation of the surgical morbidity.[6]

Routine prophylactic stoma formation in ovarian cancer patients undergoing elective surgery needs careful consideration, especially given the morbidity associated with bowel stoma. Patients with low colorectal anastomosis, previous radiotherapy, technically challenging resections, abscess/infections in the pelvis, malnutrition, and frailty seem to benefit from a diversion.[7]

Reversal of covering stomas in the era of maintenance regimens needs careful timing to avoid compromise of the overall oncologic outcome through delay of systemic treatment. Evidence does not favor early versus late reversal and shows comparable outcomes.[8] Therefore indications should be based on the overall patient picture, clinical history, preferences, and morbidity. The anastomotic integrity before stoma closure is crucial to reveal issues such as fistulas, insufficiencies, and stenosis.[9]

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