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UROLOGICAL ONCOLOGY

Fast recovery after radical cystectomy. A multidisciplinary challenge

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Radical cystectomy nowadays is the treatment of choice for muscle-invasive bladder cancer. Despite many efforts, the overall, cancer-specific survival and complication rate of patients after this procedure has not changed in the last few decades. In the recent years many fast recovery protocols or “fast track” programs have been designed to become the basis of perioperative management after colorectal surgery, vascular, thoracic, and even more recently radical cystectomy [1, 2]. These programs attempt to modify the physiological and psychological responses to major surgery, contributing to the reduction of post-surgical complications and hospital stay, and to the improvement of the cardiopulmonary and bowel function after surgery; this is translated into a faster recovery for patients [3, 4].

Nowadays, there are only a few studies based on the use of fast recovery protocols in urological surgery, this is why the authors of the paper “Alvimopan: A cost-effective tool to decrease cystectomy length of stay” [5] should be congratulated on presenting their experience concerning this topic. Arumainayagam et al. in 2007 implemented a fast recovery protocol which led to a significant reduction in hospital stay and an equivalent reduction in morbidity for patients undergoing radical cystectomy compared with traditional clinical guidelines [1].

The usage of a minimally invasive approach is included in the 22 items of the ERAS society recommendations [4]. Minimally invasive pelvic surgery has been shown to decrease the inflammatory response when compared to the open approach. Recently, laparoscopic and robotic radical cystectomy has been increasingly performed in the treatment of bladder cancer and merits special consideration. While open radical cystectomy and pelvic lymph node dissection remain the gold standard in treating non-metastatic muscle invasive bladder cancer, this major surgery is still associated with high morbidity close to 70% in some cases. Numerous centers have reported in the last years their

experience with laparoscopic or robotic approach [6]. Unfortunately, most of these studies reported retrospective data or prospective comparative data. Despite these limitations, laparoscopic and robot-assisted radical cystectomy seem to be associated with overall lower perioperative complications, and shorter hospital stay with equivalent short term oncological safety. Future high quality, high volume controlled studies should help in reaching definitive conclusions.

Intestinal complications are one of the most common problems after radical cystectomy. The etiology of ileus is multifactorial with a combination of central and peripheral nervous system, hormonal influences, neurotransmitter and local inflammatory pathways. Surgical stress, bowel manipulation, opioids and intraoperative fluids can break the standard homeostasis in the gastrointestinal tract and produce postoperative ileus and impaired function of gastrointestinal absorption; so the prevention and management of this complication should be with a multidisciplinary team (Nutrition, Anesthesiology and Urologist). Factors that help to reduce this are epidural anesthesia, minimally invasive surgery, fine tissue manipulation, avoidance of fluid overload, and early oral feeding. In addition, the routine use of nasogastric tube decompression should be avoided after surgery because of the higher incidence of fever, atelectasis and pneumonia in patients who carry it, and if any nasogastric tube is used during surgery it should be removed before extubation.

Since 2012 our department has been exercising the application of an “early recovery protocol after surgery” program for patients undergoing laparoscopic radical cystectomy and urinary diversion with the collaboration of the Anesthesiology and Reanimation Department, and the Nutrition Unit of our hospital. We hope to have positive results in the years to come.

The usage of fast recovery programs as the presented in this article using the Alvimopan shows

that this is a feasible multidisciplinary challenge and is useful in the recovery of patients undergoing radical cystectomy, demonstrated by a shorter hospital stay without the increasing risk of postop-

erative complications. Future multicenter collaborations evaluating prospective cohorts of urological patients following identical standardized care pathways should be performed.

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