



Canadian Association
of General Surgeons

BRIEF SPECIALTY UPDATES FOR THE GENERAL SURGEON
Clinical Practice Committee

COLORECTAL SURGERY Literature Update: *Edition 1.*

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To Prep or Not to Prep?

BACKGROUND

In 1973 Nichols et al. published 2 landmark studies showing that mechanical bowel prep (MBP) combined with oral antibiotics (OAB) lowered the rate of surgical site infection (SSI) in elective colorectal surgery (1, 2). Over the next several decades, the OAB portion of the preparation was replaced with IV antibiotics given just prior to surgery. Then, in 2003, a Cochrane review (and subsequent updates) found that MBP “may be associated with an increased rate of anastomotic leakage and wound complications (3-6).” In response, many surgeons stopped prepping their patients altogether, a practice supported by the 2013 ERAS guidelines (7). More recently, (re)-emerging evidence has shown that OAB given in conjunction with MBP results in fewer complications than no preparation (8-10). The most recent joint ERAS guidelines from the American Society of Colorectal Surgeons (ASCRS) and Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) (11) and the 2019 ASCRS bowel preparation in elective colorectal surgery guidelines (12) now recommend MBP with OAB over MBP alone or no preparation.

CURRENT STATUS OF THE LITERATURE

Although it appears that MBP with OAB is superior to MBP alone, there have been few studies that directly compare MBP with OAB to no prep, or OAB alone to no prep. With conflicting guidelines and studies, many surgeons are uncertain how to proceed. A recently published JAMA review may help settle some of this uncertainty (13). In their network meta-analysis of 38 RTCs, each of the 4 possible treatment arms (MBP+OAB, MPB only, OAB only, no prep) were compared. The authors found no difference in anastomotic leak between the 4 groups, but found that MBP with OAB had the lowest rate of SSI, followed by OAB alone. The MBP and no prep groups had the highest rates of SSI, but there were no significant differences between the two.

RECOMMENDATION

Based on this and numerous other reviews and guidelines (11, 12), MBP with OAB is currently the preferred prep for elective colorectal procedures.

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<https://www.fascrs.org/physicians/clinical-practice-guidelines>



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Acute Diverticulitis: Lavage or Resect?

BACKGROUND

The management of diverticulitis is constantly evolving. More patients are being managed non-operatively, with elective resection rates decreasing (14). However, there is a small segment of patients with acute diverticulitis that are too unwell to be managed non-operatively. These patients typically undergo a resection with end colostomy, or primary anastomosis with or without a diverting ileostomy. However, in recent years, there has been increased interest in laparoscopic lavage without resection. Several studies suggest a benefit to lavage, but all demonstrate some element of selection bias (15, 16). The first RCT comparing lavage to resection was not carried out until after 2008.

CURRENT STATUS OF THE LITERATURE

There have been 3 randomized controlled trials comparing laparoscopic lavage with resection as treatment for perforated diverticulitis(17-19). The DILALA trial demonstrated similar morbidity and mortality with shorter hospital stays and fewer permanent ostomies for patients in the laparoscopic lavage group (19). The SCANDIV trial also found no difference in major post-operative complications between groups, but reported higher rates of reoperation and missed cancers in the lavage group(18). The LOLA trial (one arm of the Ladies trial) was stopped early by the safety monitoring board due to an increased event rate (major morbidity or mortality) in the lavage group(17). A meta-analysis of these three trials showed higher overall rates of reoperation, reoperation for infection, and need for percutaneous abscess drainage following laparoscopic lavage. There was no difference in mortality (20).

RECOMMENDATION

Despite recent interest and early promise, laparoscopic lavage for perforated acute diverticulitis is not supported by evidence. This recommendation is in keeping with the most recent guidelines from ASCRS (21).

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<https://link.springer.com/article/10.1007%2Fs11605-017-3462-6>
<https://www.fascrs.org/physicians/clinical-practice-guidelines>



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Watch and Wait?

BACKGROUND

Total mesorectal excision (TME) and neoadjuvant therapy have led to higher survival rates and lower recurrence rates for patients with rectal cancer. However, these improvements come at a cost of significant morbidity: over 60% of patients report urinary and/or sexual dysfunction post-resection (22). Additionally, up to 20% of patients have complete pathological response following neoadjuvant therapy (23). These factors have led to the concept of “watch and wait,” where patients with clinical complete pathological response following neoadjuvant therapy are followed in a surveillance program instead of proceeding to resection (24).

CURRENT STATUS OF THE LITERATURE

While the results of numerous studies looking at watch and wait are promising, there are several issues that have made results difficult to apply to the general population. An international watch and wait database constructed to record and track the long-term outcomes of patients who are in watch and wait programs highlights the difficulty in comparing results from different centers (25), as different programs use different neoadjuvant therapy regimens, definitions of clinical complete response, surveillance protocols, and definitions of recurrence/persistent disease. It is also important to note that complete *clinical* response is not the same as complete *pathological* response, as microscopic residual disease may not be clinically detectable or radiologically identifiable. Currently, national and international guidelines on rectal cancer therapy currently do not fully address the watch and wait option (26, 27).

RECOMMENDATION

Based on the heterogeneity of watch and wait studies and the lack of international consensus regarding definitions and protocols, the watch and wait approach for rectal cancer should be reserved for patients treated in centers with appropriate multidisciplinary teams, preferably in the setting of a clinical trial or registry.

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[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)31078-X/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31078-X/fulltext)



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**BRIEF SPECIALTY UPDATES FOR THE GENERAL SURGEON
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