

Should a Contrast Enema Be Performed Before Reversal of a Diverting Stoma in Lower Rectal Surgery?

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A defunctioning loop ileostomy is often used to reduce the consequences of anastomotic leakage, especially in a low rectal anastomosis. Hanna et al. [1] showed that fecal diversion could be recommended as a selective tool to protect or ameliorate an anastomotic leak after a colorectal anastomosis. Tan et al. [2] also argued that the creation of diverting stomas could potentially minimize the fatal outcomes of anastomotic leakage, although it might not substantially decrease the incidence of anastomotic leakage in rectal cancer surgery. However, some authors reported that a diverting stoma did not have a significant relationship with symptomatic anastomotic leakage before and after their propensity score matching [3]. Another study also argued that a diverting stoma did not affect postoperative morbidity in a large cohort of patients undergoing low rectal anastomosis and that the routine use of a diverting stoma could rather delay postoperative recovery [4].

In the stage of stoma reversal, there are many different concepts and ideas about the effectiveness of a water-soluble contrast enema for the assessment of anastomotic integrity after low rectal surgery. Some investigators report that the contrast enema does not provide additional information when the results of rectoscopy and digital rectal examination (DRE) are normal [5]. However, in other studies, a contrast enema was effective in excluding clinically significant anastomotic problems, especially after clinical anastomotic leaks [6].

Most surgeons perform the closure of the ileostomy after using a water-soluble contrast enema to check the anastomosis to confirm there is no sign of leakage. However, Palmisano et al. [7] per-

formed the reversal of a protective stoma, despite a finding of persistent radiological and subclinical leakage, in selected patients. Seo et al. [8] evaluated the efficacy of a water-soluble contrast enema in predicting anastomotic healing after low rectal anastomosis and categorized the abnormal radiologic features into four types of their design based on the morphologic patterns: namely, dendritic, horny, saccular, and serpentine. They found that certain types of leakage forming cavitory lesions had better clinical outcomes after leakage had been arrested and the stoma had been restored. This issue should be discussed and evaluated through a larger-scale study for more definitive clinical implications.

A water-soluble contrast enema study is helpful in detecting radiologic leakage before reversal of a diverting stoma, but these examinations are sometimes difficult to interpret, especially in the presence of a pouch or a “dog-ear” from a colo-anal anastomosis constructed by using the double-stapling technique. Therefore, for patients with a diverting stoma, surgeons should always be mindful to select the best way and the appropriate time to perform the stoma restoration, or they should decide to delay the stoma restoration, based on the radiologic finding, as well as clinical information, such as the results of a digital rectal examination.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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