

Figure 1. Algorithm for management of wounds to colon and intraperitoneal rectum.

and in emergency surgery, with mixed results.⁷⁻¹⁰ A multicenter study of the WTA⁷ found higher rates of anastomotic leaks and abscesses after stapled repairs, while a multicenter study of the American Association for the Surgery of Trauma⁸ found no significant difference. Most studies are not well-controlled and there is a high risk of bias.¹⁰ Overall, outcomes favor hand-sewn anastomoses, but it is acknowledged that the optimal technique in healthy bowel is the one with which the surgeon is most comfortable.^{7,10}

Diversion is not recommended routinely, but there are situations in which it might be considered. In 1994, the Memphis group¹¹ proposed resection with primary repair for destructive colon wounds unless the patient received six or more units of packed red blood cells or had comorbid medical diseases. The group continues to promote this approach for penetrating¹² as well as blunt¹³ colonic injuries, with morbidity and

mortality rates comparing favorably with contemporary published literature.¹⁴⁻¹⁷ On the other hand, a prospective multicenter study of the American Association for the Surgery of Trauma¹⁴ concluded that the surgical method of colon management was not the determinant of abdominal complications, and suggested that primary anastomosis be considered in all patients. The current algorithm encourages the surgeon to perform primary repair or anastomosis but to use his or her judgment if there are real risks of anastomotic failure. We offer factors for consideration to include those that might compromise perfusion or healing of the anastomosis (e.g., persistent shock, heart failure, chronic steroid use) or create an unfavorable local environment for healing (e.g., potential exposure to leaking urine or pancreatic enzymes).

To improve quality of life and avoid stoma-related complications, the surgeon may consider early ostomy closure, that is,

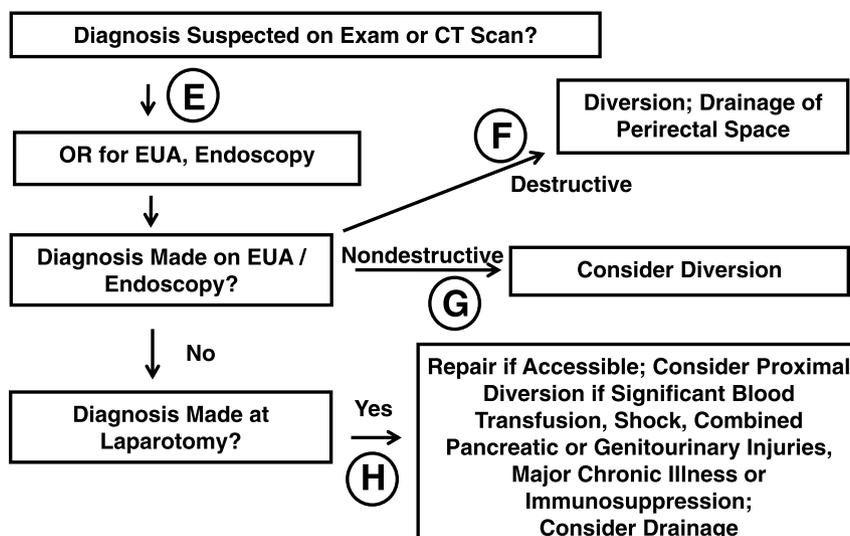


Figure 2. Algorithm for management of wounds to extraperitoneal rectum.