Hartmann's Operation – Still Relevant in the 21st Century?

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It is now over 80 years since Henri Hartmann described an operation for resection of a cancer in the distal sigmoid and upper rectum, resulting in a permanent sigmoid colostomy [1]. Subsequent surgeons have recognized the value of the procedure in acute left-sided colonic disease, particularly complicated diverticular disease [2], where the colostomy could be reversed at a later stage when the patient had recovered.

Hartmann's procedure is recognised by most colorectal surgeons to be a blunt but effective method of dealing with left-sided colonic emergencies. However, the procedure is not without its problems, including dehiscence of the rectal stump, colostomy complications such as parastomal hernia formation and prolapse, and complications related to the reversal operation. Anastomotic leak rates as high as 16% have been reported following reversal of Hartmann's operation [3–5], which is higher than accepted leak rates following elective primary resection and anastomosis of the left colon. Furthermore, it has always been recognised that a proportion of patients will be left with a permanent stoma. Reasons include a personal desire to avoid another major operation, because they are deemed unfit for a second operation or the surgeon feels the procedure would be technically challenging. The reported rate of reversal of colostomy following Hartmann's operation varies considerably from 30 to 70% [6–9]. There are a number of possible reasons for such wide discrepancy. Case mix is important as colostomy reversal is less likely to be considered following surgery for cancer. However, the perseverance of the surgical team is also an important factor, with an enthusiastic team more likely

to be prepared to perform what can be a more challenging procedure than the original resection. The place of the operation in the armamentarium of the colorectal and general surgeon has receded as new procedures have developed. In particular, awareness that primary resection and anastomosis in acute colonic emergencies can be performed safely [10], avoiding a colostomy, raises the question as to whether Hartmann's procedure should be consigned to the history books. Furthermore, the development of expanding metal stents has increased therapeutic options in acute obstruction of the left colon, again at the expense of Hartmann's procedure. However, despite these advances, there will remain a group of patients where resection of the primary pathology is necessary, but in whom primary anastomosis is considered too risky.

In the current issue, Oomen et al. (pp. 419–425) report their results of Hartmann's procedure performed in 71% of 114 patients presenting with acute complications of diverticular disease, with a mortality rate of 17.2%. Reversal of the colostomy was attempted in 90% of patients, which was successful in all but two, with an anastomotic leak rate of 4.8%. These results are impressive and indicate that some of the concerns surrounding Hartmann's operation are unfounded and the operation will continue to have a role, particularly in the sick patient with perforation of the sigmoid colon, who requires a simple, quick operation, with a high chance of restoration of intestinal continuity once they have recovered. Hartmann's operation will continue to play an important role in the management of colonic emergencies.

References

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