

**Primary Anastomosis vs Hartmann Procedure in Acute Complicated Diverticulitis. Evolution over the Last Twenty Years**

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**Abstract**

*Background/Aims:* Aim of this review is to assess the role and indications for primary sigmoidectomy with direct anastomosis for diverticulitis comparing it with the Hartmann's procedures.

*Methods:* A literature search was performed using MEDLINE (PubMed), Google Scholar and The Cochrane Library and the articles from January 1990 until June 2011 were analyzed. All patients were divided into three groups: primary anastomosis (PA), primary anastomosis and stoma protection (SP) and Hartmann's procedure (HP). Number of patients, overall mortality and morbidity, the rate of fistulization, the rate of reversal after SP (RSP) and after HP (RHP) and the Hinchey classification have been considered.

*Results:* The mortality was of 38/1010 patients (3.8%) for PA, 11/153 patients (7.2%) for SP and 139/800 patients (17.4%) for HP. The morbidity was reported in 103/325 patients (31.7%) in PA, in 23/97 patients (23.7%) in SP and in 290/586 patients (49.5%) in HP. Fistula formation was recorded in 35/625 patients (5.6%) for PA, in 10/149 patients (6.7%) for RSP and 11/426 patients (2.6%) for RHP. The intestinal continuity was restored in 82/628 patients (13.1%) who underwent SP and in 315/581 patients (54.2%) undergoing HP. A total of 790 patients (54.5%) were classified in class I-II Hinchey and total of 659 patients (45.5%) was classified in class III-IV Hinchey.

*Conclusion:* The PA has a lower morbidity and mortality in relation to the HP and except some limited indications, should be used as treatment of choice in the case of diverticulitis.

**Key words:** primary anastomosis, Hartmann procedure, diverticulitis disease

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