

Mechanical Bowel Preparation: Keep It or Abandon It?

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Until recently, vigorous preoperative mechanical cleansing of the bowel, together with or without the use of oral antibiotics, was thought to reduce the risk of septic complications after colorectal surgery. However, well-designed clinical trials regarding mechanical bowel preparation (MBP) started to be published from 1972, and their results caused some colorectal surgeons to doubt this long-standing custom. From 2003, Guenaga et al. [1], using the Cochrane database, reported four times on the use of MBP for elective colorectal surgery. They concluded that there was no statistically significant evidence that patients benefited from MBP or from the use of rectal enemas.

However in a 2003 survey, the American Society of Colon and Rectal Surgeons estimated that 99% of its members still prescribed some type of MBP and that 75% used oral antibiotic prophylaxis as part of their standard preoperative protocol for elective colorectal surgery [2]. Also, the authors revealed that most of the respondents (90%) from a Korean national survey were in favor of a preoperative MBP procedure and that 49% of the respondents agreed with the use of oral antibiotics [3]. Despite of the many studies insisting that MBP has no usefulness, current clinical practice does not follow any guideline. This may be explained as the 'no more MBP' concept being beyond surgeons' common sense feeling that the surgical field should be protected from contamination sources to prevent infection-related complications.

There are several practical issues concerning the MBP procedure. Firstly, MBP procedures vary among clinicians. Thus, standardization for the MBP procedure is very much needed. Secondly, novel bowel preparation agents, Coolprep (polyethylene glycol solution + ascorbic acid), Picolyte (sodium picosulphate +

magnesium citrate), have been introduced into clinical practice from 2012. These agents reduced the inconvenience to the patients. However, the effectiveness and safety of MBP using these agents for colon surgery are not well known. Despite the availability of several different products for colon cleansing, a need for a better regimen that provides excellent colon cleansing without tolerability and safety concerns continues to exist. Thirdly, most of colorectal surgery is conducted by using a laparoscopic technique. However, data on MBP in patients submitted for rectal surgery and laparoscopic colorectal surgery are not sufficient. Lastly, enhanced recovery after surgery (ERAS) is well established and has been developed to optimize perioperative care and to facilitate discharge. According to ERAS society's recommendations, preoperative MBP should not be used routinely in colorectal surgery [4]. In addition, the application of this recommendation to Korean patients must be verified.

In conclusion, more convincing data are required if MBP is to be abandoned. As the authors point out, members of the Korean Society of Coloproctology should make an effort to establish Korean guidelines for the use MBP. Large-scale prospective randomized trials should be conducted to achieve this purpose.

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