Mechanical bowel preparation continues to be routinely used before colorectal surgery. The procedure generally involves use of an oral purgative, which leads to copious diarrhoea. In the review by Slim et al, the solution of choice was predominantly polyethylene glycol (PEG). Preparation with PEG is not a patient friendly procedure. The requirement to drink 4 litres of PEG challenges patients’ tolerance and their willingness to comply. Use of PEG leads to frequent complaints of abdominal pain, nausea, and bloating. For these reasons, use of phospho-soda, which requires drinking only 90 ml of fluid, has become more favourable.

Nursing management to ensure ingestion of PEG can be intensive. Insertion of a nasogastric tube is sometimes required, and electrolyte imbalances must be monitored. Admitting patients 1 day early for bowel preparation represents a negative fiscal cost to the health service and interferes with the ability of patients to undertake their socially prescribed roles. Given the fiscal, social, and nursing time costs, the issue of bowel preparation is worthy of investigation.

Although mannitol, pico prep, and PEG were the solutions assessed in studies included in the review by Slim et al, 516 of the 720 patients who received bowel preparation received PEG. Because of the small numbers of patients who received mannitol (n = 102) or pico prep (n = 82), the sample sizes may be too limited to draw conclusions about their effectiveness as bowel cleansing agents.

Anastomotic leaks in colorectal surgery have catastrophic patient outcomes. The highest incidence of leaks occurs after low anterior resection. The important result of the review by Slim et al was the higher anastomotic leak rate with the use of PEG; however, specific details about the surgical procedures were not reported. 2 of the studies reviewed were first published in the 1970s, and none of the review trials assessed the use of phospho-soda, which is a commonly used bowel cleansing agent.

Slim et al do not offer a definitive answer to the question of whether mechanical bowel preparation can be safely omitted and state that extrapolation from this review into best practice would be unwise. Addional larger studies that compare the effects of different types of bowel preparation and compare bowel preparation with a genuine, no preparation condition are needed before nurses and patients can safely escape use of bowel preparation before colorectal surgery.

Lorraine Andrews, RGON, BN
South Auckland Health
Auckland, New Zealand


Review: bowel preparation before elective colorectal surgery increases anastomotic leakage more than no preparation

Evid Based Nurs 2005 8: 85
doi: 10.1136/ebn.8.3.85

Updated information and services can be found at:
http://ebn.bmj.com/content/8/3/85

These include:

References
This article cites 3 articles, 0 of which you can access for free at:
http://ebn.bmj.com/content/8/3/85#BIBL

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Topic Collections
Articles on similar topics can be found in the following collections

- Drugs: infectious diseases (241)
- Injury (108)
- Trauma (135)
- Pain (neurology) (312)
- Case management (4)
- Diarrhoea (31)
- Drugs: gastrointestinal system (16)
- General surgery (42)
- Internet (387)

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/