

A randomised trial of hospital versus home administered enemas for flexible sigmoidoscopy

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For flexible sigmoidoscopy adequate preparation of the left side of the colon is essential. This is often achieved by administration of a phosphate enema by nursing staff in the endoscopy department. Patients may find the procedure embarrassing; it is also time consuming for the nurses. Home administered oral bowel preparation has been reported as safe, cheap, and effective, but no studies have compared home with hospital administration of enemas.¹⁻³ We report a randomised trial of hospital administered enemas versus enemas administered by patients at home.

Methods and results

Consecutive patients having flexible sigmoidoscopy were randomised to receive a phosphate enema (Fletcher's Phosphate Enema (128 ml), Pharmax, Bexley, Kent) as bowel preparation either in the endoscopy department or at home with self administration.

Flexible sigmoidoscopy was performed without sedation by three endoscopists (CM-A, AS, and GT), who performed about equal numbers of endoscopies in each of the groups. The site reached at intubation was recorded. Adequacy of preparation was recorded on a scale of 0 to 10, according to the percentage of mucosa visible (0 = no visible mucosa, 10 = all of the mucosa was visible). The endoscopists were blinded to whether the enema had been given at home or in hospital.

After examination patients were asked to complete a questionnaire on the comfort of the preparation. Patients with known arthritis or visual impairment were excluded from the study. Informed consent was obtained from each patient, and the study was approved by the hospital's ethics committee.

In all, 120 consecutive patients were recruited to the study, 60 of whom were randomised to home preparation. Seven patients were excluded because of inability to self administer an enema. Of the 56 patients offered home preparation, 31 accepted and 25 declined. Patients who declined were instructed to attend the endoscopy department. The median age of patients was 65 (range 34-85) years, and the two groups did not differ in age or sex distribution.

The main results of the study are shown in the table. In addition, 29 patients in the home group stated that they found home preparation easier or less embarrassing than a previous hospital administered enema. All but one of the patients in the home group stated that they would choose home preparation again. Reasons given by patients for refusing home preparation were: administration seemed too difficult (17), fear of mess (7), and lack of understanding of the instructions (2).

Comment

This trial shows that preparation of the left side of the colon is equally good whether the enema is administered by nurses in the endoscopy department

Self administered bowel preparation at home versus hospital preparation. Values are numbers (percentages) of patients, unless stated otherwise

Place of bowel preparation	Intubation at least as far as descending colon	Mean (SD) bowel preparation score*	Preparation uncomfortable
Hospital:			
Patients randomised to hospital group (n=57)	50 (88)	8.2 (1.7)	21 (37)
Patients who refused home preparation (n=25)	22 (88)	8.4 (2.0)	8 (32)
Home (n=31)	26 (84)	9.2 (1.0)†	2 (6)‡

*Based on scale of 0 to 10 according to the percentage of mucosa visible (0=no visible mucosa, 10=all of the mucosa was visible).

†P<0.01 (Student's *t* test).

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or by patients at home. The patients who opted for home preparation, however, may be those who are more confident and generally able. Although home administration produced better preparation scores than hospital administration, it is difficult to account for this difference.

Disappointingly, almost half of the patients who were offered home preparation declined, and the results have to be interpreted cautiously. Most of the patients declining home preparation were worried that they would not be able to administer the enema correctly. Patients who were offered home preparation were not seen in person before being sent the enema; perhaps if the technique is carefully explained in the outpatients clinic when the examination is booked, or in the endoscopy department for those patients attending for surveillance examinations, the refusal rate may decrease. Interestingly, some of the patients who had refused home preparation said that they would choose home preparation in future.

Home preparation would free nursing staff for other duties in the endoscopy clinic and provide more privacy for patients. Added to improved patient satisfaction, these factors outweigh the small postage and packaging charge for sending the enema to patients' homes.

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