

# Barriers against split-dose bowel preparation for colonoscopy

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## Abstract

### Objective

Although split regimen is associated with higher adenoma detection and is recommended for elective colonoscopy, its adoption remains suboptimal. The identification of patient-related barriers may improve its implementation. Our aim was to assess patients' attitude towards split regimen and patient-related factors associated with its uptake.

### Design

In a multicentre, prospective study, outpatients undergoing colonoscopy from 8:00 to 14:00 were given written instructions for 4 L polyethylene glycol bowel preparation, offering the choice between split-dose and day-before regimens and emphasising the superiority of split regimen on colonoscopy outcomes. Uptake of split regimen and association with patient-related factors were explored by a 20-item questionnaire.

### Results

Of the 1447 patients (mean age  $59.2 \pm 13.5$  years, men 54.3%), 61.7% and 38.3% chose a split-dose and day-before regimens, respectively. A linear correlation was observed between time of colonoscopy appointments and split-dose uptake, from 27.3% in 8:00 patients to 96% in 14:00 patients ( $p < 0.001$ ,  $\chi^2$  for linear trend). At multivariate analysis, colonoscopy appointment before 10:00 (OR 0.14, 95% CI 0.11 to 0.18), travel time to endoscopy service  $> 1$  h (OR 0.55, 95% CI 0.38 to 0.79), low education level (OR 0.72, 95% CI 0.54 to 0.96) and female gender (OR 0.74, 95% CI 0.58 to 0.95) were inversely correlated with the uptake of split-dose. Overall, the risk of travel interruption and faecal incontinence was slightly increased in split regimen patients (3.0% vs 1.4% and 1.5% vs 0.9%, respectively;  $p = \text{NS}$ ). Split regimen was an independent predictor of adequate colon cleansing (OR 3.34, 95% CI 2.40 to 4.63) and polyp detection (OR 1.46, 95% CI 1.11 to 1.92).

## **Conclusion**

Patient attitude towards split regimen is suboptimal, especially for early morning examinations. Interventions to improve patient compliance (ie, policies to reorganise colonoscopy timetable, educational initiatives for patient and healthcare providers) should be considered.