0–22) compared to 15 (10–25) when ScopeGuide view was not available ($p=0.03$).

Table 1 PTH-003

	Male	Female
Gender	0	1
BMI < 22	1	1
Constipation	2	2
History of abdominal pain	1	1
Previously difficult colonoscopy	2	2
Previous abdominal surgery	1	1

Conclusion ScopeGuide does not improve caecal intubation rates and times, but does improve comfort levels in patients with technically difficult colonoscopies performed by very experienced colonoscopists. The effect of ScopeGuide on caecal intubation rates and times in technically difficult colonoscopies in the hands of less experienced colonoscopists should be studied.

Competing interests None.

Keywords colonoscopy, ScopeGuide.

PTH-003

DOES SCOPEGUIDE IMPROVE CAECAL INTUBATION? A RANDOMISED CONTROLLED TRIAL

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Introduction Incomplete colonoscopy is one explanation for missed cancers in the right colon. Patients with incomplete colonoscopy are more likely to be older, female and have a history of abdominal or pelvic surgery. Most difficulties during colonoscopy arise from often unpredictable and recurrent looping of the colonoscope within floppy and elastic bowel. Magnetic endoscope imaging (ScopeGuide; Olympus, Tokyo, Japan) allows accurate visualisation of loops. The aim of this study was to assess the effect of ScopeGuide in a group of patients likely to have technically difficult colonoscopy.

Methods Consecutive patients over 60, attending St Mark's hospital for a screening colonoscopy between September 2009 and July 2010 were identified and those scoring ≥ 2 on the predicted difficulty score were included (table 1). This was a randomised parallel trial in which patients were randomised in 1:1 ratio to a colonoscopy with ScopeGuide view available or not. All colonoscopies were performed by consultant endoscopists. The primary outcome measure was caecal intubation time in the study and control groups. Secondary outcome measures included: caecal intubation rates within 20 min (intention to treat analysis), patient pain scores and numbers of polyps detected.

Results 44 patients (22 in each arm) completed the study protocol. Colonoscopy was complete to caecum in all 44 cases. Intubation to caecum was achieved within 20 min in 21 of 22 (95%) patients when the ScopeGuide view was available. When the ScopeGuide view was not available, in 18 of 22 (82%) patients caecal intubation was achieved within 20 min, $p=0.35$. In 3 cases, the endoscopist elected to view the ScopeGuide in order to complete the procedure – these were analysed as failed caecal intubations. Median time taken to complete intubation to caecum in the ScopeGuide arm was 6.6 min (IQR 4.3–11.1) compared to 9.1 min (7.4–13.5) ($p=0.07$) in the no ScopeGuide arm. There was a trend towards shorter duration of looping when ScopeGuide was available compared to when it was not, but this did not reach statistical significance (2.2 vs 4.3 min, $p=0.07$). Median patient pain score in the group when ScopeGuide view was available was 4 (IQR