## 03 WATER-ASSISTED SIGMOIDOSCOPY IN NHS BOWEL SCOPE SCREENING: THE WASH MULTICENTRE RANDOMISED CONTROLLED TRIAL

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Introduction Bowel cancer is the UK's 2nd most common cause of cancer death. To reduce this risk, the NHS Bowel Cancer Screening Programme invites 55-year olds for sigmoidoscopy (Bowel Scope Screening-BSS). A national patient survey showed much higher procedural pain than anticipated, potentially impacting on compliance and screening effectiveness. Studies indicate that a new technique using water-assisted scope insertion (WAS) may minimise bowel distension, hence reduce pain and also increase polyp detection.

We aimed to assess the effect of WAS on procedural pain and adenomatous polyp detection, compared to CO2 assisted scope insertion. We aimed to perform a cost-effectiveness analysis of WAS, a discrete choice experiment (DCE) to ascertain patient preferences, and to survey trial endoscopists' technique preference after the trial.

Methods We performed an RCT of 1123 people undergoing BSS, randomised 1:1 to WAS (for which the endoscopists received training) or CO2. The primary outcome was patient-reported moderate/severe pain. The key secondary outcome was adenoma detection rate (ADR).

**Results** We found no difference in patient-reported moderate/ severe pain between WAS and CO2 (p=0.47;logistic regression; predictive marginal estimates 14% in WAS and 15% in CO2). Moderate/severe pain was significantly lower in both arms than in the previous national survey (p<0.01,chi-square).

ADR was significantly higher in the CO2 arm (p=0.03, logistic regression; odds ratio 1.45 (95% CI; 1.03, 2.04); predictive marginal estimates 11% in WAS and 15% in CO2). However, it remained above the minimum national performance standard in both arms and there was no statistical difference in mean number of adenomas nor overall polyp detection rate. Cost-consequence analysis revealed a negligible difference between the two techniques. The DCE revealed that patients care more about the risk of missing an abnormality and risk of a serious complication than the level of pain experienced. Exit survey of trial endoscopists revealed 10 preferred WAS, one preferred CO2 and 4 were neutral.

**Conclusions** In the context of enema-prepared unsedated screening sigmoidoscopies performed by screening-accredited endoscopists, no difference in patient-reported pain was seen when using either a CO2 or WAS intubation technique. There is no need for screening sigmoidoscopists to switch to a WAS technique. Caution should be given to monitoring ADR if WAS is used in enema-prepared sigmoidoscopies.

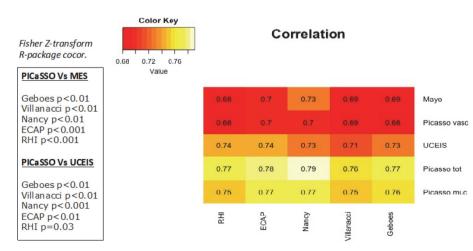
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## 04 MULTICENTRE PROSPECTIVE VALIDATION STUDY OF THE PADDINGTON INTERNATIONAL VIRTUAL CHROMOENDOSCOPY SCORE (PICASSO) IN ULCERATIVE COLITIS

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Introduction Mucosal healing (MH)is an important goal in the treatment of ulcerative colitis (UC). The newly published PICaSSO score characterises subtle mucosal and vascular changes and defines MH. We aimed to validate in real-life the PICaSSO score and assess its ability to predict relapse.



Abstract O4 Figure 1 Correlation between endoscopic scores and histological scores