



## AB040. 25. Should routine bowel-prep for colonoscopy be adjusted according to body mass index (BMI)?

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**Background:** There is a lack of research assessing individualised regimes of bowel preparation pre-colonoscopy based on patients' body mass index (BMI). Most Centres use a 'one-size-fits-all' approach. We carried out this study to investigate whether BMI is an independent predictor of inadequate bowel prep in elective outpatient colonoscopies

**Methods:** Comprehensive, retrospective cohort study looking at elective colonoscopies carried out in three tertiary hospitals in Perth, WA, between January 2015 to June 2018. Patient demographics, indication for colonoscopy, type of

prep used, procedural outcomes and reported adequacy of bowel preparation were analysed to determine relevant associations using SPSS Software (version 24) for statistical analysis.

**Results:** We looked at 534 elective colonoscopies across the three tertiary hospitals. Mean age at admission was 58.2, mean weight was 88.9 kg and mean BMI was 28.8 kg/m<sup>2</sup>. Multivariate logistic regression analysis showed that being obese [odds ratio (OR) of 1.8, P=0.017], being overweight (OR of 1.6, P=0.057) and being male (OR of 1.5, P=0.035), are significantly and independently associated with inadequate bowel preparation, after modelling for potential confounding factors age, type of prep used and year of procedure.

**Conclusions:** Increase in BMI is significantly and independently associated with poor bowel preparation. It may be time we start to individualise bowel-prep according to BMI. As to how much adjustment is needed, we hope to answer this question in a subsequent prospective, multi-centre randomised control trial (RCT).

**Keywords:** Body mass index (BMI); bowel-prep; colonoscopy

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