



## AB094. 116. Obesity is associated with increased risk of colonoscopy failure

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**Background:** Obesity may be a risk factor for colonoscopy failure due to inadequate bowel preparation, patient positioning, sedation and ineffective application of abdominal pressure. Achieving the recommended >90% completion rate in obese patients is critical as obesity increases the risk of colorectal cancer. This study aims to determine if obesity [body mass index (BMI) >30] increases the risk of colonoscopy failure.

**Methods:** Consecutive patients undergoing elective colonoscopy were prospectively included over one month. Patients with prior colon/rectal resections were excluded. Colonoscopy failure was defined as failure of caecal intubation. Anthropometric measurements, caecal intubation time or failure, sedation, bowel preparation, therapeutic procedures, patient comfort, complications and

endoscopist experience were recorded. Data were analysed using Fisher’s exact test and Student’s *t*-test.

**Results:** A total of 164 patients were included (male 70, female 94). Obese patients comprised 29% (BMI  $\geq$  to  $n=48$ ). The failure rate in obese patients was 10.4% *vs.* 4.3% in the non-obese (odds-ratio 2.58), although this was not statistically significant ( $P=0.16$ ). There was no significant difference between groups regarding caecal intubation time (11.8 *vs.* 11.1 min,  $P=0.54$ ), sedative use, comfort or complications. Consultant endoscopists had a shorter caecal intubation time compared with non-consultant doctors (9.2 *vs.* 12.1 min,  $P=0.02$ ).

**Conclusions:** This study shows an odds-ratio of 2.58 for colonoscopy failure in obese patients, which at 10.4% exceeds national guidelines. Although low patient numbers may have affected the statistical significance of this result, it does suggest that more experienced endoscopists should be available for obese patients. Obesity implications should also be considered during informed consent.

**Keywords:** Body mass index; colonoscopy; caecal intubation

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