**Introduction**

Polyt detection rate (PDR) is an accepted measure of quality of colonoscopy. Several factors may influence PDR including time of procedure and rank of colonoscopy. Our unit provides evening colonoscopy lists (6-9 pm) to meet high demand and improve patient convenience, but it is unknown if colonoscopy performance declines in the evening. We have evaluated PDR by endoscopy session with particular reference to the evening session.

**Methods**

Data were collected retrospectively for all NHS outpatient colonoscopies performed at Norfolk and Norwich University Hospital in 2011. Timing, demographics, staffing, indication and findings of colonoscopy were recorded. Descriptive statistics were calculated and statistical analysis was performed using multivariate regression. PDR was defined as the detection of one or more polyps at colonoscopy.

**Results**

Data from 2576 colonoscopies were included: 1163 (45.1%) were performed in the morning, 1123 (43.6%) in the afternoon and 290 (11.3%) in the evening. Unadjusted PDR in the morning, afternoon and evening session were 46.4%, 35.9% and 37.2% respectively. Mean age was lower in the evening session (58.15) compared to morning (64.68) and afternoon (62.29).

Factors associated with polyp detection were assessed by multivariable logistic regression. Male gender (OR = 1.76, 95% CI 1.48–2.11, p < 0.001), increasing age (OR = 1.045, 95% CI 1.035–1.055, p < 0.001) and successful caecal intubation (OR = 2.48 95% CI = 1.55–4.01, p < 0.001) were all significantly associated with higher polyp detection. The indications ‘faecal occult blood screening’ (p < 0.001) and ‘polyp surveillance’ (p < 0.001) were strongly positively associated and ‘anaemia’ (p = 0.01) negatively associated with PDR.

Following standardisation of covariates (including endoscopists), there was no significant difference in PDR between sessions. With the morning as the reference value, the odds ratio for polyp detection in the afternoon and evening were 0.93 (95% CI = 0.72–1.18) and 1.15 (95% CI = 0.82–1.61) respectively. PDR was not shown to be affected by rank of colonoscopy within list (p = 0.904), sedation dose, trainee involvement or endoscopy room.

**Conclusion**

Time of day was not shown to affect polyp detection rate in our clinical practise. Evening colonoscopy had equivalent efficacy and seems to be a useful and effective tool in meeting increasing demands for endoscopy. Standardisation was shown to have a considerable effect as demographics, indication and endoscopist varied substantially between sessions. Evening sessions, outside of standard working hours, were popular with a younger population. Consistent with previous studies, caecal intubation is an important marker of the quality of colonoscopy.

**Disclosure of Interest**

None Declared

**REFERENCES**

1. BSG quality and safety indicators for endoscopy. Mar 2007