0C-088

## COMFORT SCORES IN COLONOSCOPY PERFORMANCE

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**Introduction** The principle indicator for assessing competence in colonoscopy is caecal intubation rate (CIR). Comfort is a key auditable outcome for colonoscopy but there are no standards for patient comfort during colonoscopy and no reports of comfort scores in relation to other quality indicators. The aim of this study is to analyze the role of different factors in determining an individual's performance in colonoscopy and to explore the significance of patient comfort scores in colonoscopist performance.

**Methods** All colonoscopies performed in our endoscopy centres are recorded in customised reporting systems (SQLscope

 Table 1
 OC-088 Performance per year

Year	Number of colonoscopies	CIR (%)	NCRL 4-5 (%)	PDR (%)	PE worse than expected (%)
2008	3966	92.2	10.5	28.4	5.5
2009	4235	93.1	7.9	27.3	4.2
2010	3032	94.5	8.6	30.0	4.3

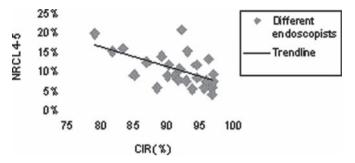


Figure 1 OC-088 Relation between CIR and NRCL 4-5

and Unisoft), which log all key performance indicators. Data was extracted between 2007 and 2010. The following variables were measured: CIR, nurse-reported comfort levels (NRCL) on a 5-point scale (1 = no discomfort, 2 = minimal discomfort, 3 = mild discomfort, 4 = moderate discomfort, 5 = severe discomfort), polyp detection rate (PDR) (hyperplastic and adenomatous), patient's experience (PE) of the procedure (better than expected, as expected, worse than expected) and use of sedation. Significant discomfort was defined as a NRCL of 4 or 5 or a PE of worse than expected.

**Results** A total of 12561 colonoscopies were recorded with NRCL and PE. NRCL of 4 or 5 was measured in 1181 cases (9.4%). The average number of procedures performed per endoscopist per year was 146 (range 11–483). Figure 1 shows the relation between CIR and NRCL (4–5). There was a significant negative correlation (R = -0.57; p < 0.005). A positive correlation was found between PDR and CIR (R = 0.57; p < 0.005). The amount of midazolam given during the procedure was negatively correlated with CIR (R = -0.39; p = 0.055). Finally, fewer than one in 20 patients rated their experience worse than expected and a worse than expected PE of colonoscopy showed a negative correlation with CIR (R = -0.54; p < 0.01). Table 1 shows the outcome of the different variables per year (2007 and 2010 are only partial years). CIR, PDR and NRCL have collectively improved year on year.

**Conclusion** This study shows that endoscopists with a high CIR perform colonoscopies with less patient discomfort than those with lower CIRs, use less midazolam and see and remove more polyps. Thus achieving a high CIR and high PDR does not need to be associated with more pain and more sedation. Comfort scores should be included in the assessment of overall performance in colonoscopy to provide a fuller picture of performance.

Competing interests None.

**Keywords** colonoscopy, quality, comfort.

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