COLONOSCOPY SKILLS IMPROVEMENT (CSI) TRAINING IMPROVES PATIENT COMFORT DURING COLONOSCOPY

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Background

- The CSI program, designed by The Canadian Association of Gastroenterology, is an up-skilling and improvement of colonoscopy skills course for all endoscopists. It is a one-day live endoscopy course with 1:1 instructor to student ratio.
- Previous investigation has shown an association between CSI training and lower sedation and analgesic dosing during colonoscopy.

Purpose

- To assess the effect of CSI training on patient comfort and sedation related complications during colonoscopy

Methods

- Retrospective cohort study (Oct. 2014 to May. 2016)
- 17 CSI trained endoscopists in St. John's, NL
- Per endoscopist, data from 50 colonoscopies prior to, immediately after, and 8 months after CSI training
- Primary outcome is intraprocedural comfort, classified as comfortable or discomfort (mild, moderate, significant), based on nursing records
- Secondary outcomes are intraprocedural hypotension (<90/50 mmHg or <20% baseline) and hypoxia (SpO2% <85%)
- Data analyzed using SPSS v20.0

Results

- n= 2533 colonoscopies
- Patient comfort improved immediately after CSI training (55.1% v. 70.2%, p<0.001)
- Patient comfort maintained improved at 8-month timepoint when compared to baseline (55.1% v. 69.8%, p<0.001)
- No significant change was noted in the rate of intra-procedural hypoxia or hypotension following training

Figure 1: Patient Comfort vs. CSI Training

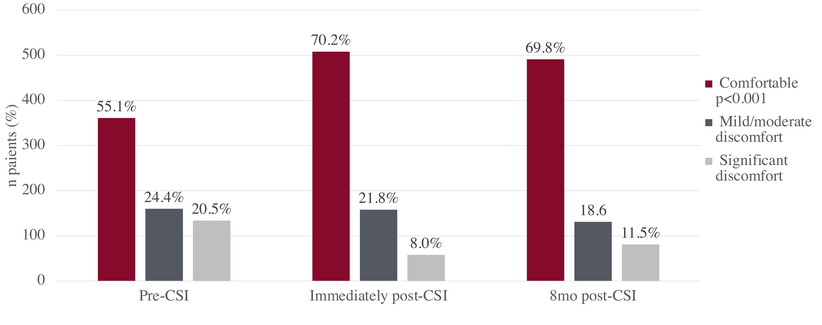
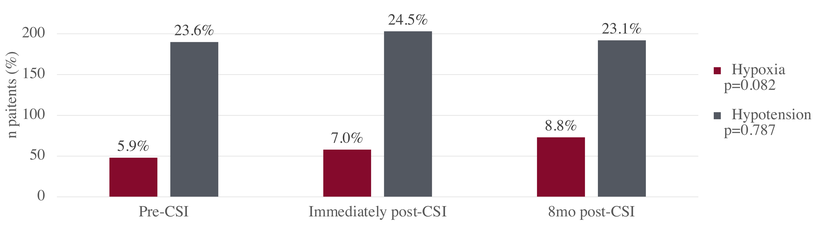


Figure 2: Intraprocedural Hypoxia and Hypotension vs CSI Training



Discussion

- This is the first study to evaluate the impact of a colonoscopy quality improvement initiative on patient comfort.
- CSI program's emphasis on patient and endoscopist ergonomics, identification and management of active loops, early and frequent patient position changes, and use of water insufflation may account for the increased patient comfort.

Limitations

- Variability in nursing notes' detail and subjectivity of patient comfort assessment
- Relatively small, retrospective study

Conclusion

- CSI training is associated with improved patient comfort during colonoscopy.

Future Direction

- Further follow-up, 5 years post-CSI training
- Larger, randomized controlled trial

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