

Over one-quarter of colonoscopies were reported to have difficulty maintaining insufflation by endoscopists.

We observed associations with four factors.

INTRODUCTION

Insufflation of the colon with a gas allows for adequate visualization of the mucosal tissue and advancement of the endoscope during colonoscopy.

It also causes discomfort for patients, hence sedation is used to mitigate symptoms during colonoscopies. We hypothesized deeper levels of sedation would be associated with difficulty maintaining insufflation.

The current project's aim is to:

Describe factors associated with difficulty maintaining insufflation during colonoscopy.

METHODS

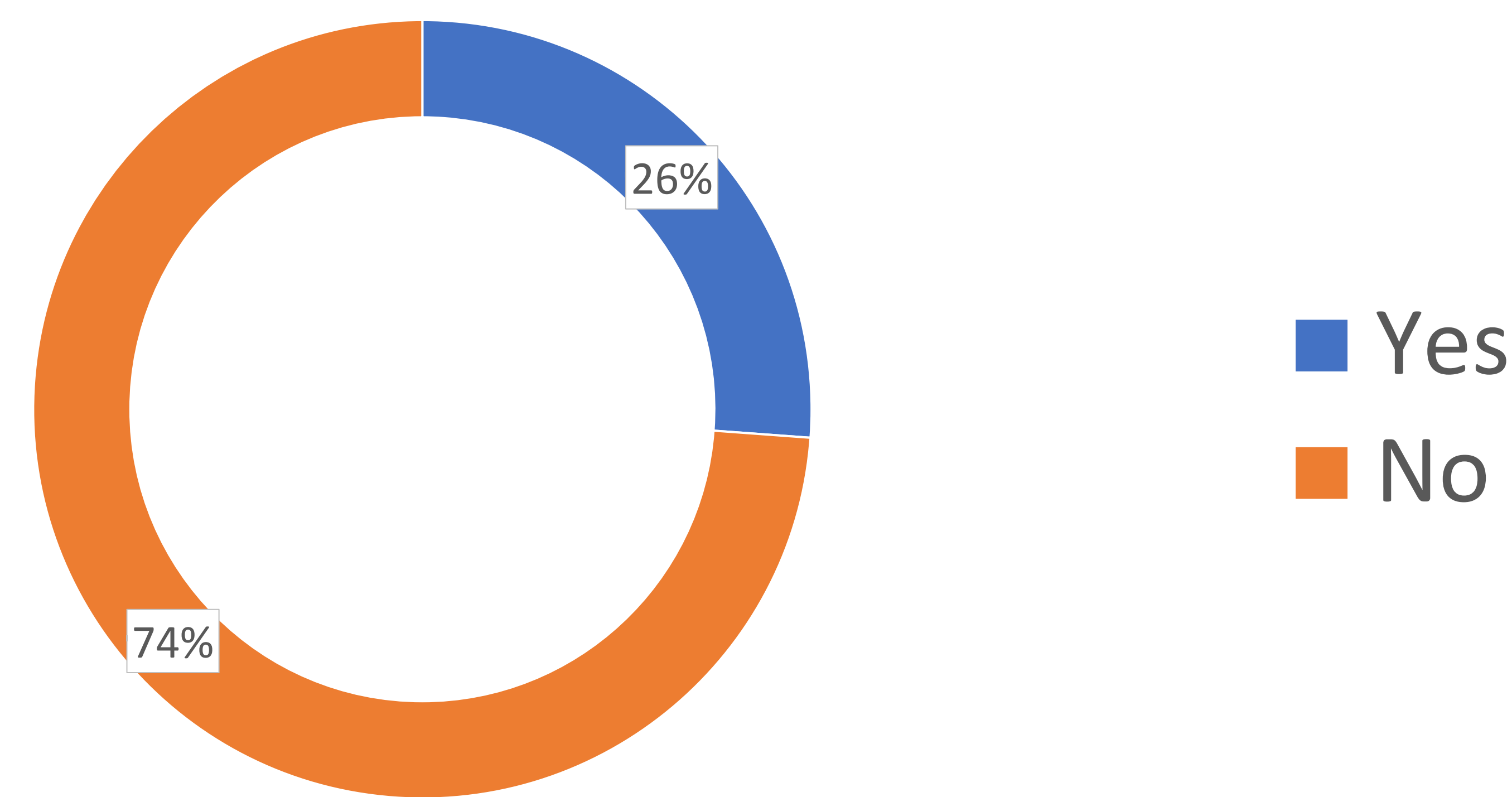
Prospective study on outpatient colonoscopies at VAMC from Nov 2019 to Mar 2020

Basic demographic data collected from EMR.

Procedures were done under Monitored Anesthesia Care (MAC) with propofol or moderate sedation with fentanyl, midazolam, diphenhydramine.

Post-procedure questionnaire completed by endoscopist. This recorded bubble score, endoscopic maneuvers and difficulty maintaining insufflation.

Difficulty Maintaining Insufflation during Colonoscopies



	Difficulty maintaining insufflation (n=129)	No difficulty maintaining insufflation (n=364)	Adjusted OR ratio	Adjusted P value	95% Wald Confidence Limits	
Age, mean ± SD	63.7 ±10.4	60.2 ± 11.7	1.026	0.03	1.00	1.050
Fellow involvement, n (%)	101 (78.3)	223 (61.3)	3.043	0.0002	1.68	5.506
Total procedure time, mean ± SD	38.5 ±19.4	30.8 ± (17.5)	1.020	0.0025	1.00	1.033
MAC sedation, n (%)	54 (42.2)	123 (33.9)	3.173	<0.0001	1.89	5.329

RESULTS

542 participants; 12 excluded

Difficulty maintaining insufflation was reported in **129 (26%) procedures** compared to 364 procedures where no difficulty was reported

Comparison of the two groups showed that patients who had difficulty maintaining insufflation:

- **Were more likely to be older in age (P=.03),**
- **Were more likely to have undergone MAC sedation during colonoscopy (P=.0001),**
- **Were more likely to have longer procedure times (P=.0025)**
- **Were more likely to have fellow involvement in the case (P=.0002).**

DISCUSSION

Insufflation helps improve mucosal visualization and allows for safe advancement of the endoscope. Thus, it is **integral** in ensuring an **efficient colonoscopy** and **improving Adenoma Detection Rate (ADR).**

We found four factors associated with difficulty maintaining insufflation that may be worth exploring.

To our knowledge, no other studies have explored a relationship with maintenance of insufflation during colonoscopy.

Factors associated with the Maintenance Of Colonic Insufflation During Colonoscopy

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