

DSEN ABSTRACT

Safety of Bowel Cleansers When Combined with Bisacodyl Stimulant Laxative

A study conducted by the Canadian Network for Observational Drug Effect Studies (CNODES)

Summary

- Using bisacodyl in combination with commonly prescribed colonoscopy bowel cleansers was not associated with increased risk of ischemic colitis, major adverse renal outcomes, or death.

Key messages

- The findings of this study should provide some reassurance that the co-prescription of bisacodyl with bowel cleansers does not increase the risk of ischemic colitis and other adverse clinical outcomes.

Project Lead & Team

- Michael Paterson, MSc
- Team members [available here](#)

What is the issue?

- Colonoscopy is among the most performed endoscopic procedures in North America.
- Although the stimulant laxative bisacodyl is frequently prescribed alongside colonoscopy bowel cleansers, little is known about the safety of bisacodyl in real-world practice.

What was the aim of the study?

- This study, conducted by CNODES, evaluated the safety profile of commonly prescribed colonoscopy bowel cleansers when used alone versus in combination with the stimulant laxative bisacodyl.

How was the study conducted?

- We conducted a population-based cohort study using administrative data from the Canadian province of Ontario and the United States (US) IBM MarketScan® database.
- The study cohorts included patients aged 18 years and older receiving a new prescription for a bowel cleanser (polyethylene glycol or sodium picosulfate), alone or in combination with bisacodyl, between 2007 and 2016.
- The risk of hospitalization for ischemic colitis and other adverse clinical outcomes within 30 days of receipt of the cleanser was compared among patients receiving a bowel cleanser with bisacodyl versus without. Results were combined across sites using a statistical approach called meta-analysis.

What did the study find?

- About 3.8 million users of bowel cleansers were included in the study cohorts. In Ontario, picosulfate was more commonly prescribed and bisacodyl use increased over time. In contrast, polyethylene glycol represented 95% of new prescriptions in the US, with 15% in combination with bisacodyl. Further, among those who received bisacodyl, the cumulative dosage of bisacodyl was significantly greater in Ontario, where 68.6% had exposures exceeding 10 mg compared to only 18.7% in the US.
- Hospitalization with ischemic colitis occurred in 1.8 per 10,000 new cleanser exposures. When compared with patients receiving a colonoscopy bowel cleanser alone, those receiving it in combination with bisacodyl were not at increased risks of hospitalization for ischemic colitis, important adverse renal outcomes, or death.
- Although further research is needed to confirm these results, the low risk of ischemic colitis, together with the relative innocuity of the association with bisacodyl, is reassuring.

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For more information, please contact info@cnodes.ca.