Colonic preparation correlates with fasting breath hydrogen in patients undergoing colonoscopy

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Background/aims:
Fasting breath hydrogen has been reported to be low after fasting and polyethylene glycol ingestion. However, the relationship between fasting breath hydrogen and colonic preparation for colonoscopy has not been studied before. We evaluated fasting breath hydrogen in patients undergoing colonoscopy and correlated it with the quality of colonic preparation.

Methodology:
One day before colonoscopy, the patients ingested clear liquid diet and starting in the afternoon the day before colonoscopy they drank polyethylene glycol 8oz every 10 minutes for 3 hours. They fasted overnight. Fasting breath hydrogen was measured using an EC 60 gastrolyzer. Colonic preparation was rated as excellent, fair or poor. The colonoscopic findings were noted.

Results:
There were 69 male patients. 89% had excellent or fair colonic preparation (Group A) 11% had poor preparation (Group B). Fasting breath hydrogen in Group B patients 14.5 +/- 1.5 ppm was significantly higher compared to that in Group A patients 2.2 +/- 0.2 ppm (p < 0.005 t-test). In other respects the two groups were similar.

Conclusions: Patients undergoing colonoscopy after polyethylene glycol ingestion who have poor colonic preparation have higher fasting breath hydrogen compared to those who have excellent/fair colonic preparation. The clinical implication of this observation is discussed.

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