Fellow Involvement During Colonoscopy Does Not Reduce Adenoma Detection Rate

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Colonoscopy is effective in reducing the morbidity and mortality of colorectal cancer (CRC). However, colonoscopy is a technical procedure that requires expertise to maximize accuracy, and an adequate procedure volume is necessary to achieve competence [1]. Few studies have examined if gastroenterology (GI) fellows, who have less endoscopy experience than their attending physicians, are less likely to identify adenomas and cancers.

We performed a retrospective review of 1,190 patients who underwent age-appropriate, average-risk screening colonoscopy to assess whether performance by a GI fellow affects adenoma detection rate (ADR). Nine hundred seventy-one colonoscopies were performed by one of five GI and three colorectal surgery attendings alone. Two hundred nineteen were performed by a GI fellow under the supervision of one of the same five GI attendings. There was no significant difference in patient age, gender, or colonoscopy prep quality between the patients in the attending group and the trainee group. The polyp detection rate (PDR) in the attending group was 43.3% versus 48.8% in the fellow group. The adenoma detection rate (ADR) was 25.6% in the attending group versus 27.9% in the fellow group. Advanced adenoma detection was 6.5% in the attending group versus 5.9% in the fellow group.

ADR is increasingly used as a quality measure to assess colonoscopic competency. Factors reported to affect PDR and ADR include withdrawal time, cecal intubation rates, adequacy of bowel preparation, and time spent cleaning the colonic mucosa of excess fluid [2]. There is little data on whether involvement of a gastroenterology fellow enhances

polyp or adenoma detection. In two previous studies, PDR and ADR were increased with fellow involvement [3, 4]. In our retrospective study, the ADR during procedures performed by a GI fellow under attending supervision was comparable to those performed by an attending alone. This finding has clinical significance, because although GI fellows have less endoscopic experience than GI attendings, they are able to identify clinically relevant polyps while performing supervised colonoscopies. This can possibly be explained by an increased recognition of small polyps by a second set of eyes or by longer procedure times [4]. Future prospective studies are needed to determine if fellow involvement during colonoscopy impacts ADR.

References

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