A Comparison of Colonoscopy and Double-Contrast Barium Enema for Surveillance after Polypectomy

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Précis: Colonoscopy is superior to barium enema for postpolypectomy surveillance.

Introduction
It is widely held that adenomatous polyps are precursors of colorectal cancer and that their removal is important because of the potential for reducing the incidence and mortality of colorectal cancer. Periodic surveillance examinations after polypectomy have been considered necessary because of the high frequency of adenomatous polyps detected at follow-up. This study compared efficacy of colonoscopy and double-contrast barium enema for surveillance after polypectomy.

Method
A total of 582 patients with newly diagnosed adenomatous polyps underwent a total of 862 paired colonoscopies and double-contrast barium enemas for surveillance.

Results
- Colonoscopy detected polyps in 45% of examinations, whereas the rate for barium enema was only 16%.
- Colonoscopy detected adenomas in 28% of examinations, whereas the rate for barium enema was only 11%.
- The accuracy of barium enema in detecting colonoscopy-identified adenomas depended on the size of the adenomas. The procedure detected 32% of adenomas that were 0.5 cm or smaller, 53% of those 0.6 cm to 1.0 cm, and 48% of adenomas larger than 1.0 cm.

Discussion
In this study, colonoscopy is superior to double-contrast barium enema for surveillance in patients who have undergone polypectomy. The ability of barium enema to detect clinically important polyps appears not good enough for the surveillance of patients who are at increased risk for polyps or for a diagnostic evaluation of the colon.