

## Background

Based on current National Comprehensive Cancer Network guidelines, colonoscopic surveillance after colorectal cancer resection should begin at 1 year.

## Objective

The aim of this study was to determine whether the incidence of cancer or advanced polyp detection rate was high enough to justify colonoscopy at 1 year.

## Design

The Ochsner Clinic Tumor Registry Database was queried for patients who underwent a segmental colectomy or proctectomy between 2002 and 2010. Patients who had a preoperative colonoscopy and at least 1 documented postoperative colonoscopy were included. We considered new cancer or polyps of  $\geq 1$  cm as missed on the preoperative colonoscopy. Patients with an identified genetic trait causing a predisposition to colorectal cancer were excluded.

## Results

Five hundred twelve patients underwent resection, and 155 met our inclusion criteria. The average age was 64 years, and 53% patients were male. There were 32.9% with stage I disease, 35% with stage II disease, 27.1% with stage III disease, and 5.2% with stage IV disease. Of these patients, 52.2% had a right colectomy, 7.1% had a left colectomy, 16.8% had a sigmoid colectomy, 22% had a low anterior resection, and 1.3% had a transanal resection. The average time to first postoperative colonoscopy was 478 days (SD  $\pm 283$  days). Twenty-four patients had adenomatous polyps detected on their first surveillance colonoscopy, but only 5 (3.2%) polyps were  $\geq 1$  cm, and there was no correlation between stage of cancer and finding a polyp. No new cancers were detected, but 3 (1.9%) had an anastomotic recurrence.

## Conclusions

The performance of surveillance colonoscopy at 1 year resulted in the detection of only 5 missed polyps  $\geq 1$  cm and no metachronous cancers. Anastomotic recurrences were rare, and the majority were in patients who had rectal cancer that could be evaluated by in-office flexible sigmoidoscopy. Extending the time to first colonoscopy appears to be safe and would help conserve valuable resources, including physician

and facility time, which is imperative in the current health care climate

## Commentary:

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Current protocols on surveillance after curative resections for colorectal cancer do not show any cancer related survival benefit in carrying out colonoscopy at the end of one year. Even though with a small study population of 155 patients this paper has reflected the same results by detecting only five polyps (3%) of significant size whilst rectal anastomotic recurrences were 2 out of 3 (2%) recurrences at one year colonoscopy.

In addition others agree with these findings including the American Society of Clinical Oncology recommending that the initial colonoscopy be carried out at the end of 3 years. Considering the increased detection of colorectal cancers and limitations of trained colonoscopists and resources it may be more appropriate for Sri Lanka to adopt a delaying of the first colonoscopy to 2 years after a colonic cancer resection with 6 monthly flexible sigmoidoscopies for rectal cancer surveillance. The importance of high quality preoperative colonoscopy should be emphasized along with this approach.

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## Answers for Images in Surgery (page 54)

1. Intrinsic brain tumor, with evidence of haemorrhage and necrosis, with mass effect. Diagnosis is likely to be an intrinsic malignant brain tumor, glioblastoma multiforme
2. It is a performance scoring system used to assess patients with brain tumors
3. The tumor is causing significant mass effect, which causes raised intracranial pressure with eventual brain herniation, leading to Cushing's response (Hypertension and bradycardia leading to brain hypoxia and ischaemia) leading to death.