

12 Month vs 6 Month Follow-up Colonoscopy After Piecemeal Endoscopic Resection of Large Nonpedunculated Colorectal Lesions

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Background and aims:

Current colonoscopy guidelines recommend nonpedunculated lesions ≥ 20 mm in size and removed piecemeal should have follow up colonoscopy in 6 months to ensure complete resection. Some data suggest that a 12-month follow-up may be safe and effective for selected lesions. Standard follow-up is 6, 18, 54 and 114 months after piecemeal resection. If the first follow-up visit is 12 months, the sequence is 12, 48, and 108 months. We investigated whether planned 12-month follow-up colonoscopy is as safe and effective for selected lesions when compared to 6-month follow-up.

Methods:

We utilized a prospectively collected database of 1599 consecutive, large, and nonpedunculated colorectal lesions referred to an expert colonoscopist at a tertiary center. Lesions were removed by endoscopic mucosal resection and assigned a follow-up interval based on their size, histology, and the need to resect additional synchronous lesions identified during the index colonoscopy at our center. Pedunculated polyps (n=158), no follow-up at our center (n=553), follow-up outside of 2 to 36 month reference range (n=10), no polyp or benign growth (n=81), patients referred to surgery for cancer (n=64), and inability to endoscopically resect the lesion (n=24), were excluded from this analysis. Polyp size, location, removal method, endoscopic mucosal resection (EMR) utilization, and lesion pathology were compared to reduce confounding factors.

Results:

Lesions assigned to a 12-month surveillance interval (n=151) had a smaller mean size (19.48mm \pm 7.59 vs. 34.32mm \pm 17.84), were more likely to have serrated histology (n=69 (45.70%) vs. n=62 (11.85%), and more likely to be resected en bloc (n=31 (20.53%) vs. n=31 (5.93%) compared to lesions assigned to a 6-month surveillance interval. Of the 151 lesions assigned to a 12-month surveillance interval, 11 (7.3%) had recurrence and none had cancer at follow-up. Among 523 lesions assigned to a 6-month surveillance interval, 53 (10.1%) had recurrence and 1 had cancer at follow-up. Among 65 lesions ≥ 20 mm resected piecemeal and assigned to a 12-month surveillance interval, 8 (12.31%) had recurrence and none had cancer at follow-up.

Conclusion and Potential Impact:

These results support a 12-month surveillance interval after piecemeal resection of selected large, nonpedunculated, colorectal lesions. Initial 12-month surveillance results in fewer colonoscopies, lower cost, and less inconvenience to patients.