Alberta Health Services

Alberta Colorectal Cancer Screening Program (ACRCSP)

Post Polypectomy Surveillance Guidelines

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TABLE OF CONTENTS

Background

Adherence to evidence based guidelines is supported by the reduction of interval colorectal cancers and colorectal cancer (CRC)- related mortality.

Surveillance interval guidelines are based on the presumption that a high quality baseline colonoscopy was performed (i.e. that the colonoscopy was completed to the cecum, and that the colonic mucosa was well visualized). It is also important to ensure the completeness of polypectomy and that all polypectomy material was sent to pathology. Patients with a failed colonoscopy (for example due to inability to reach cecum or poor bowel preparation) should undergo repeat colonoscopy (either by same operator or referred, depending on the reason why the colonoscopy was incomplete) or, less preferably, diagnostic imaging of the colon by CT colonography.

A system should be in place to ensure that all pathology reports are reviewed and that recommendations to primary care physician regarding surveillance intervals are adjusted as indicated. Endoscopists should make clear recommendations to primary care physicians about the need for and timing of subsequent colonoscopy. Considering that the recommendation largely depends on the histological findings, interval recommendation in patients with polyps should account for the pathology report instead of being made at the time of colonoscopy.

The decision regarding surveillance interval should be based on the most advanced finding(s) at baseline colonoscopy. The polyp size is based on size documented at the time of colonoscopy. Patients with both significant serrated polyp findings and concurrent adenomas may be at a more advanced stage in the progression toward cancer. Closer follow up may be indicated in some cases based on clinical judgment.

For findings with short follow-up recommendations, a longer subsequent follow-up interval may be appropriately applied when a follow-up exam shows improvement in findings, i.e. reductions in the number, size, and /or histological severity of lesions. Occurrence of lower gastrointestinal (GI) symptoms in between surveillance episodes should be addressed and investigated as per usual clinical care.

A fecal occult blood test (FOBT) should not be performed in patients undergoing surveillance colonoscopy.

Surveillance should be carried out until the benefit is outweighed by age and/or co-morbidity. Considering that the average lead time for an adenoma to progress to carcinoma is 10 years, and that the risk of post-colonoscopy complications is greater in older patients, the appropriateness of surveillance beyond the age of 75 should be determined on a case-by-case basis.

Terms, Definitions and Practical Points

“Small polyp” refers to a polyp that is less than 1cm in size. The term “diminutive polyp” refers to one that is 5mm or less in size, but doesn’t hold implications for the purpose of the guidelines.

“Low-risk adenoma” (LRA) refers to patients with 1–2 tubular adenomas <10 mm in diameter. “High-risk adenoma” (HRA) refers to patients with tubular adenoma >/=10 mm, 3 or more adenomas, adenoma with villous histology, or high grade dysplasia (HGD).

“Advanced neoplasia” is defined as adenoma with size >/=10 mm, villous histology, or HGD. The terms “carcinoma in-situ” or “intraepithelial carcinoma” or “intramucosal carcinoma” should not be used, “high-grade dysplasia” should be used instead.

“Malignant polyp” refers to a polyp with invasive adenocarcinoma, defined as invasion through the muscularis mucosae into the submucosa (pT1).

Post Colonoscopy Screening

Patients with NO adenomas or sessile serrated lesions should undergo screening based on their underlying risk level:

- Average risk patients should rescreen in 10 years, using the screening modality that is recommended for average risk.

- Patients with a first-degree relative with CRC or high-risk polyp <60 years of age or with multiple first degree relatives with CRC at any age should have a repeat colonoscopy in 5 years

Post Polypectomy Surveillance

1. **Patients with small (<1cm) rectal hyperplastic polyps should maintain screening intervals based on underlying risk level (consider colonoscopy results as synonymous to normal).**

2. **Patients with 1 or 2 small (<1cm) tubular adenomas with low-grade dysplasia:**
   - Repeat colonoscopy in 5-10 years.
   - Return to screening intervals based on underlying risk level (discontinue surveillance) if follow-up colonoscopy is normal.

3. **Patients with 3 to 10 adenomas, or any adenoma >1 cm, or with villous features or with high-grade dysplasia:**
   - Repeat colonoscopy in 3 years.
   - If the follow-up colonoscopy is normal or shows only 1 or 2 small tubular adenomas with no high-grade dysplasia, then the interval for the subsequent examination should be 5 to 10 years.

4. **Patients with >10 small (<1cm) adenomas on a single examination:**
   - Repeat colonoscopy in less than 3 years.
   - Consider the possibility of an underlying familial syndrome.

5. **Patients with Sessile Serrated lesions:**

   Repeat colonoscopy in 3 years if:
   - 3 or more small (<10mm) sessile serrated adenomas/polyps or traditional serrated adenomas.
   - Any sessile serrated adenomas/polyps or traditional serrated adenomas >/= 10mm OR with dysplasia.
   - Because of interobserver variation in the pathological differentiation of hyperplastic polyps (HP) from sessile serrated adenomas/polyps (SSA/P), proximal colonic serrated lesions >10 mm in size that are designated HP may be considered to be SSA / P by clinicians. Conversely, it would be unusual for a small (<5mm) polyp in the rectosigmoid to represent a sessile serrated adenoma/polyp rather than a hyperplastic polyp.

Repeat colonoscopy in 5 years if:

- 1-2 small (<10mm) sessile serrated adenomas/polyps or traditional serrated adenomas with no dysplasia.

- 4 or more hyperplastic polyps proximal to sigmoid colon or any hyperplastic polyp >5mm proximal to sigmoid colon.

6. Patients with sessile lesions that are removed piecemeal:

- Tattooing of the polypectomy site is recommended. Repeat colonoscopy in 2-6 months to verify complete removal. Residual polyp can be treated endoscopically. Large amount of residual polyp should be either referred for surgical excision or referred to an expert endoscopy center. Completeness of removal should be based on both endoscopic and pathologic assessments (i.e. biopsy the polypectomy site even if endoscopically normal).

- Once complete removal has been established, repeat colonoscopy in 3 years.

- Review surveillance interval after 2 consecutive three-yearly examinations.

7. Patients with malignant polyps:

- Defined as polyps with invasive adenocarcinoma, i.e. invasion through the muscularis mucosae into the submucosa (pT1).

- Repeat colonoscopy within 3 months to verify complete removal. Completeness of removal should be based on both endoscopic and pathologic assessments (i.e. biopsy the polypectomy site even if endoscopically normal).

- Repeat colonoscopy 6 months later then return to colonoscopy every 3 years. Review surveillance interval after 2 consecutive three-yearly examinations.

8. Patients with history of polyp(s) at prior colonoscopy

- All attempts should be made to obtain further documentation regarding such polyps, especially the pathology and colonoscopy reports and follow colorectal adenoma surveillance.

- In absence of any documentation, proceed to colonoscopy (ideally 3-5 years from previous) and determine surveillance based on findings and underlying risk level.

- Patients with a prior history of small rectal hyperplastic polyps do not require surveillance and should be screened according to their underlying risk level.

9. Patients with history of colorectal cancer (out of scope)

- Patients with colon and rectal cancer should undergo high-quality perioperative clearing colonic evaluation. In the case of nonobstructing tumors, this can be done by preoperative colonoscopy.

- Patients undergoing curative resection for colon or rectal cancer ought to undergo another colonoscopy 1 year after the resection. If the examination performed at 1 year is normal, then the interval to the next subsequent examination should be 3 years. Following the examination at 1 year, the intervals before subsequent examinations may be shortened if there is evidence of HNPCC or if adenoma findings warrant earlier colonoscopy.

- If the colonoscopy at 3 years is normal, then the interval before the next subsequent examination should be 5 years.

- Periodic examination of the rectum for the purpose of identifying local recurrence usually performed at 3 to 6 month intervals for the first 2 or 3 years, may be considered after low anterior resection of rectal cancer.

ACRCSP POST-POLYPECTOMY SURVEILLANCE GUIDELINES

Screening Intervals Following a Normal Colonoscopy

Risk	Screening interval
Average risk	Rescreen in 10 years using "average risk" strategy
Family history of CRC/polyp in single first degree relative over age 60 years at diagnosis	Rescreen in 10 years using "average risk" strategy
Family history of CRC/high risk polyp in one first degree relative </=60 years at diagnosis or 2 or more first degree relatives of any age at diagnosis	Repeat colonoscopy in 5 years
Known or suspected Lynch syndrome	Repeat colonoscopy every 1-2 years

Surveillance Intervals for Adenomatous Lesions

Pathology	Screening interval	Subsequent Intervals*
Low risk adenomas (LRA): 1-2 small (<10mm) adenomas with low grade dysplasia	Repeat colonoscopy in 5-10 years	No adenoma: 10 years LRA: 5 years HRA: 3 years
High risk adenomas (HRA): 3-10 adenomas or 1 adenoma >/= 10mm or any adenoma with villous features or high grade dysplasia	Repeat colonoscopy in 3 years	No adenoma: 5 years LRA: 5 years HRA: 3 years
>10 adenomas	Repeat colonoscopy in <3 years	
Sessile polyps removed piecemeal	Repeat colonoscopy in 2-6 months to ensure complete polyp removal, then surveillance in 3 years	No adenoma: 5 years LRA: 5 years HRA: 3 years

*based on findings at first surveillance colonoscopy

Surveillance Intervals for Adenomatous and Serrate Lesions

Adenomas	Serrated Lesions	Screening interval
LOW RISK LESIONS	**LOW RISK LESIONS**	
	Small (<10mm) hyperplastic polyps in rectum or sigmoid	Maintain screening interval based on underlying risk level (consider as normal)
1-2 small (<10 mm) adenomas with low grade dysplasia		Repeat colonoscopy in 5-10 years
	1-2 small (<10mm) sessile serrated adenomas/polyps or traditional serrated adenomas	Repeat colonoscopy in 5 years
	4 or more hyperplastic polyps proximal to sigmoid colon or any hyperplastic polyp >5mm proximal to sigmoid colon	Repeat colonoscopy in 5 years
HIGH RISK LESIONS	**HIGH RISK LESIONS**	
3-10 small (<10 mm) adenomas	3 or more small (<10mm) sessile serrated adenomas/polyps or traditional serrated adenomas	Repeat colonoscopy in 3 years
Any adenoma >/= 10mm	Any sessile serrated adenomas/polyps or traditional serrated adenomas >/= 10mm*	Repeat colonoscopy in 3 years
Any adenoma with villous features or high grade dysplasia	Any sessile serrated adenoma/polyp with dysplasia**	Repeat colonoscopy in 3 years
>10 adenomas		Repeat colonoscopy in <3 years
	Serrated polyposis syndrome***	Repeat colonoscopy in 1 year

* Because of interobserver variation in the pathological differentiation of hyperplastic polyps(HP) from sessile serrated adenomas/polyps (SSA/P), proximal colon serrated lesions >10 mm in size that are designated HP may be considered to be SSA / P by clinicians. Conversely, it would be unusual for a small (<5mm) polyp in the rectosigmoid to represent a sessile serrated adenoma/polyp rather than a hyperplastic polyp.

** Consider repeat colonoscopy in 2-6 months to ensure complete removal of SSA/P or TSA with dysplasia.

*** 1) At least 5 serrated polyps proximal to sigmoid colon, with 2 or more >/=10mm; 2)any serrated polyps proximal to sigmoid colon with family history of serrated polyposis syndrome, 3) >20 serrated polyps of any size throughout the colon.

Points to make:

1) The decision regarding surveillance interval should be based on the most advanced finding(s) at baseline colonoscopy.

2) The polyp size is based on size documented at the time of colonoscopy.

3) Patients with both significant serrated polyp findings and concurrent adenomas may be at a more advanced stage in the progression toward cancer. Closer follow up may be indicated in some cases based on clinical judgment.

4) Recommendations for surveillance of serrated lesions are for the first follow up. For findings with short follow-up recommendations, a longer subsequent follow-up interval may be appropriately applied when a follow-up exam shows improvement in findings, i.e. reductions in the number, size, and /or histological severity of lesions.

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