Advanced Colorectal Polyp | GI brief

An advanced colorectal polyp diagnosis has implications for both patients and their close relatives.

The National Colorectal Cancer Roundtable created the advanced colorectal polyp GI brief to help endoscopists and primary care clinicians identify patients with advanced colorectal polyps, understand the epidemiology and associated risk factors, and most importantly know the risks of colorectal neoplasia for patients with advanced colorectal polyps and their first-degree relatives (parents, siblings, children).

Objectives:

1. Remind endoscopists that patients with an advanced colorectal polyp and their close relatives are at increased risk for advanced colorectal polyps and colorectal cancer.

2. Keep endoscopists up to date with current guidelines. Patients diagnosed with advanced polyp(s) require more frequent surveillance, and their close relatives require earlier and more frequent screening.

3. Provide template letters to communicate colonoscopy and pathology results, risk status, and follow-up recommendations for patients and close relatives.
Section 1

If your patient is diagnosed with an advanced colorectal polyp, both the patient and their family members are at increased risk for advanced colorectal polyps and colorectal cancer.

Most colorectal cancers arise from polyps and develop through either the adenoma-carcinoma sequence (conventional adenoma) or the serrated pathway (sessile serrated polyp [SSP] and traditional serrated adenoma [TSA]). Advanced colorectal polyps are the immediate precursors of colorectal cancer and both are target lesions for colorectal cancer screening.

Advanced colorectal polyps include:
- Adenomas ≥1 cm, or any adenoma with villous features or with high-grade dysplasia
- Sessile serrated polyps ≥1 cm, or any serrated lesion with any grade of cytologic dysplasia
- Traditional serrated adenomas, regardless of size

Epidemiology of advanced adenomas.
During screening colonoscopy, approximately 10% of average-risk individuals are diagnosed with an advanced adenoma. Many of the risk factors for advanced adenomas are the same as the risk factors for colorectal cancer. These include: being male, increasing age, family history of colorectal cancer and colorectal polyps, type II diabetes mellitus, obesity, smoking, alcohol consumption, and red and processed meat consumption. It doesn’t appear that the prevalence of advanced adenomas varies significantly by race.

Epidemiology of advanced serrated polyps.
The prevalence of sessile serrated polyps ranges from 2% to 9% among average-risk adults undergoing screening colonoscopy. About half are large (≥ 1 cm) and <1% show cytologic dysplasia. Most serrated polyps are located in the proximal (right) colon. The epidemiology is less defined than advanced adenomas; however, increasing age, being female, smoking, obesity, diabetes, and possibly diets in fat, carbohydrates, and calories appear to be important risk factors. Patients with large serrated polyps also have an increased risk of tubular adenomas. Traditional serrated polyps are less common, with a reported prevalence of fewer than 1%. The epidemiology of these polyps is poorly understood.

First-degree relatives (parents, siblings, children) of patients with advanced adenomas have 4-6 times the risk of being diagnosed with advanced polyps and 2-4 times the risk of colorectal cancer, regardless of the affected relative’s age at diagnosis.

First-degree relatives of patients with advanced serrated polyps are also at increased risk, but the magnitude of risk is not well defined, unless the relative meets criteria for serrated polyposis syndrome.

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Relative Risk* of Colorectal Adenomas among Siblings of Patients with Advanced Adenomas

<table>
<thead>
<tr>
<th>Relative Risk</th>
<th>No Adenomas</th>
<th>Any Adenomas</th>
<th>Advanced Adenomas</th>
<th>&gt;25% Villous Features**</th>
<th>Adenomas &gt;1cm</th>
<th>High-Grade Dysplasia**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>3.3</td>
<td>6.1</td>
<td>6.3</td>
<td>8.6</td>
<td></td>
<td>20.0</td>
</tr>
</tbody>
</table>

*Adjusted for age and sex of proband
**Relative risk for >25% villous features, adenomas >10mm, and high-grade dysplasia are not mutually exclusive
Section 2

Finding advanced colorectal polyps at endoscopy has implications for both the patient and their first-degree relatives (parents, siblings, children).

Implications for the patient

More frequent surveillance recommended

If your patient is diagnosed with an advanced colorectal polyp:

They require more frequent surveillance.

**Surveillance Guidelines for Patients with Colorectal Polyps**

<table>
<thead>
<tr>
<th>Finding on Colonoscopy</th>
<th>Colonoscopy Surveillance Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal findings</td>
<td>10 years</td>
</tr>
<tr>
<td>Small (&lt;10mm) hyperplastic polyps in rectum or sigmoid</td>
<td>10 years</td>
</tr>
<tr>
<td>1-2 non-advanced polyps</td>
<td>5-10 years</td>
</tr>
<tr>
<td>3-10 non-advanced polyps</td>
<td>3 years</td>
</tr>
<tr>
<td>&gt;10 non-advanced polyps</td>
<td>&lt;3 years</td>
</tr>
<tr>
<td>Any advanced polyp</td>
<td>3 years</td>
</tr>
</tbody>
</table>

*Confirm that the patient does not meet the World Health Organization definition for serrated polyposis syndrome: 1) ≥5 serrated polyps proximal to sigmoid, with 2 or more ≥10mm, 2) any serrated polyps proximal to sigmoid with family history of serrated polyposis syndrome, and 3) >20 polyps throughout the colon.*

**Implications for the patient’s first-degree relatives**

Earlier and more frequent screening recommended

If you diagnose a patient with an advanced colorectal polyp –

The patient’s first degree relatives should start colorectal cancer screening at age 40, or 10 years before the youngest affected relative, whichever is earlier.

**Screening modalities of choice**

If the advanced polyp was diagnosed at <60 years of age:

- Colonoscopy is the recommended screening test for all first-degree relatives (offer alternative test such as FIT if colonoscopy declined).
- Begin at age 40, or 10 years before the youngest affected relative, whichever is earlier
- Intervals of every 5 years

If the advanced polyp was found at ≥60 years of age:

- Average-risk screening tests and surveillance intervals are recommended, but screening should begin at age 40.

**This is the United States Multi-Society Task Force (USMSTF) guideline. The National Comprehensive Cancer Network (NCCN) guideline recommends that first degree relatives of individuals with advanced adenomas begin screening with colonoscopy at age 40, or at the age of onset of the affected individual, whichever is earlier. Note: the NCCN guideline pertains to advanced adenomas only (i.e., high-grade dysplasia, ≥1 cm, villous or tubulovillous histology) and not advanced serrated polyps.**
Section 3

Develop and use a simple letter to communicate reliable information regarding advanced colorectal polyps to patients and, through them, to their first-degree relatives.

Given the increased risk of advanced colorectal polyps and colorectal cancer in patients with advanced polyps, communicating colonoscopy findings, pathology results, and follow-up recommendations will help patients return for their next surveillance colonoscopy on time. It is also important that patients use these results to inform their first-degree relatives about their risk and need for earlier and more frequent screening.

We have included a template that can be sent to patients with advanced colorectal polyps. We have also included links to templates for patients with non-advanced polyps, hyperplastic polyps, and other non-neoplastic polyps. Each of the letters can be adapted for patients with multiple polyps or mixed histology.

Benefits of letter templates:

1. **Adaptable** – Inform patients of colonoscopy findings, pathology results, guideline-based surveillance recommendations, and screening recommendations for first-degree relatives.

2. **Educational** – Allow patients to share their colonoscopy results with first-degree relatives and tell them about the importance of screening at an earlier age.

3. **Sharable** – Allow patients to share colonoscopy results with their referring provider to inform them of results, follow-up recommendations, and importance of early screening for relatives.

Did you know

Patients who receive a personalized letter after their colonoscopy are more likely to know about their test findings, understand their colorectal cancer risk, and inform their relatives about screening.14

Links to templates:

This brief includes a sample letter which utilizes suggested language to inform a patient about advanced colorectal polyps. For additional sample letters and materials, please visit: https://nccrt.org/advanced-adenoma-brief.

We encourage endoscopists to work with their IT staff to incorporate these templates into their electronic health record and consider creating a master template with drop-down menus or smart text/phrases.
[Letterhead]

[Date]

[Patient Address]

Dear [Patient]:

I would like to inform you of the results from your recent colonoscopy at [medical center] on [date]. As you know, a small growth called a polyp was removed from your colon [rectum] during the procedure. As expected, the polyp was benign (not cancer). Specifically, the polyp was a precancerous advanced adenoma [AND/OR advanced serrated polyp]. If not removed, this type of polyp could have grown larger over many years and might have turned into colorectal cancer. Because you have a higher chance of developing new polyps and colorectal cancer, you should undergo a repeat colonoscopy in 3 years.

I would also recommend colorectal cancer screening for your first-degree relatives (brothers, sisters, children, and parents) beginning at age 40 [or 10 years before the youngest affected relative, whichever is earlier - please be specific based on patient’s age at the time polyps were removed]. Make your family members aware of these results so that they can discuss beginning colorectal cancer screening earlier with their physician.

I would suggest you consider changing any health habits that might increase your chance of forming more precancerous polyps and thus colorectal cancer. You may lower your chance of developing future polyps and colorectal cancer by adopting healthy habits such as not smoking, maintaining a healthy body weight, being physically active, limiting red and processed meat (such as beef, cold cuts, bacon, and hot dogs), minimizing alcohol intake (or avoiding alcohol altogether), and eating a diet with a lot of fruits and vegetables.

Please feel free to contact me at [phone number] with any questions.

Stay well.

Sincerely

[Endoscopist name]

cc: [PCP]
Sources


National Colorectal Cancer Roundtable Advanced Adenoma Working Group


To learn more on how gastroenterologists and endoscopists can play a role in the national efforts to improve colorectal cancer screening rates, view our corresponding brief at: http://nccrt.org/resource/can-gastroenterologists-endoscopists-advance-80-2018/