CONDITION

# Colorectal polyps

Learn what colorectal polyps are, which types may become cancer, how they are found and removed, and when follow-up or urgent care may be needed.

**WHAT IT IS**
Growths on the inner colon or rectal lining

**BODY SYSTEM**
Digestive

**MAIN SYMPTOMS**
Rectal bleeding, changed bowel habits, iron-deficiency anemia, abdominal discomfort

**WHAT CAUSES IT**
Acquired or inherited gene changes

**HOW IT IS DIAGNOSED**
Colonoscopy with tissue pathology

**MAIN TREATMENT**
Complete polyp removal

**CAN IT BE CURED?**
Yes, complete removal treats the polyp

**IS IT AN EMERGENCY?**
Sometimes, heavy or continuing bleeding

**LONG-TERM OUTLOOK**
Many never become cancer, but some do

## Overview

Colorectal polyps are growths on the inner lining of the colon or rectum. The colon and rectum make up the large intestine. Polyps may be raised on a stalk, slightly raised, or nearly flat.

Most colorectal polyps do not cause symptoms. They are often found during routine colorectal cancer screening or during testing for bleeding, anemia, or changes in bowel habits.

Polyps matter because some can slowly develop into colorectal cancer. This change usually takes years, and many polyps never become cancer. Finding and removing precancerous polyps can prevent some colorectal cancers.

A polyp's cancer risk depends on its type, size, number, microscopic features, and whether it was completely removed. Important types include:

The laboratory examination of removed tissue, called pathology , is needed to identify the polyp type and guide follow-up.

- Adenomas: Precancerous growths that include tubular, tubulovillous, and villous adenomas.
- Sessile serrated lesions: Often flat growths that can also become cancer over time.
- Traditional serrated adenomas: Less common precancerous polyps.
- Hyperplastic polyps: Usually low risk, particularly when they are small and located in the lower colon or rectum.
- Inflammatory or hamartomatous polyps: Growths associated with inflammation or certain inherited conditions. Their significance depends on the underlying cause.

## Symptoms

Most colorectal polyps cause no symptoms. A person can feel well even when a precancerous polyp is present.

When symptoms occur, they may include:

These symptoms have many possible causes. Hemorrhoids, digestive conditions, medicines, and colorectal cancer can cause similar problems. Symptoms alone cannot show whether a polyp is present.

Arrange a medical appointment for repeated rectal bleeding, a persistent bowel change, or unexplained anemia. Seek urgent care for heavy or continuing bleeding, black stool with weakness or dizziness, fainting, severe abdominal pain, or other rapidly worsening symptoms.

- Blood on toilet paper, in the toilet, or mixed with stool
- Dark or black stool, which can sometimes indicate bleeding higher in the digestive tract
- A lasting change in bowel habits, such as diarrhea or constipation
- Unexplained iron-deficiency anemia, meaning too few healthy red blood cells because of low iron
- Tiredness, weakness, or shortness of breath related to anemia
- Abdominal discomfort, which is less common

## Causes and risk factors

Polyps develop when cells in the colorectal lining grow in an abnormal way. Changes in genes that control cell growth can allow cells to multiply when they should not. Some gene changes occur during a person's lifetime, while others are inherited.

The chance of developing polyps generally rises with age. Many screening recommendations begin at age 45 for adults at average colorectal cancer risk, although screening plans depend on personal health and local guidance.

Factors associated with a higher chance of colorectal polyps or cancer include:

Having one or more risk factors does not mean that a person has a polyp or will develop cancer. People without known risk factors can also develop polyps.

Rare inherited syndromes can cause numerous polyps or colorectal cancer at younger ages. Examples include familial adenomatous polyposis and MUTYH-associated polyposis. Lynch syndrome mainly raises cancer risk and may not cause large numbers of polyps. Genetic counseling may be considered when there are many polyps, unusually young diagnoses, or a strong pattern of related cancers in the family.

- A previous adenoma, serrated lesion, or colorectal cancer
- A parent, sibling, or child with colorectal cancer or an advanced polyp
- Long-standing ulcerative colitis or Crohn's disease affecting the colon
- Tobacco use
- Heavy alcohol use
- Excess body weight
- Low physical activity
- Type 2 diabetes
- A diet high in processed meat or red meat

## Diagnosis

A colonoscopy is the main test used to diagnose and remove colorectal polyps. During this procedure, a clinician passes a thin, flexible tube with a camera through the rectum to examine the entire colon. Sedation is commonly used.

If a polyp is found, it is usually removed or sampled during the same procedure. A pathologist then examines the tissue under a microscope. The pathology report may describe the polyp's type, size, cell changes, and whether cancer is present.

Other colorectal screening tests can suggest that further evaluation is needed:

The quality of bowel preparation affects how well the lining can be seen. Stool left in the colon may hide small or flat polyps. If preparation is not adequate, the clinician may recommend repeating the examination sooner.

A colonoscopy report often records the number, size, shape, and location of polyps, as well as how they were removed. Keeping both the procedure and pathology reports can help future clinicians plan appropriate follow-up.

- Stool tests can detect hidden blood or certain DNA changes, but they cannot confirm or remove a polyp. An abnormal result generally needs follow-up with colonoscopy.
- CT colonography , sometimes called virtual colonoscopy, uses X-rays and computer imaging to examine the colon. A separate colonoscopy is needed if a significant polyp is found.
- Flexible sigmoidoscopy examines the rectum and lower part of the colon rather than the entire colon.

## Treatment and management

The usual treatment is complete removal of the polyp. This is called a polypectomy . Removing precancerous tissue lowers the chance that it will later become cancer.

Small polyps may be removed with a wire loop called a snare. A cold snare cuts tissue without electrical heat. Other polyps may be removed with a snare that uses cautery to cut tissue and control bleeding.

Larger, flatter, or more complex growths may require an advanced endoscopic technique. In an endoscopic mucosal resection , fluid is often placed under the lesion so it can be removed from the lining. Selected lesions may be treated with other advanced procedures at centers with relevant expertise.

Surgery is not needed for most polyps. It may be recommended if a growth cannot be safely or completely removed during colonoscopy, if invasive cancer is found, or if a person has an inherited syndrome causing extensive polyps.

After removal, treatment decisions depend on the pathology findings. If cancer cells are limited to a removed polyp, features such as depth of invasion, removal margins, and cell appearance help determine whether removal was sufficient or whether surgery should be considered.

Healthy habits support overall colorectal and cardiovascular health. These include avoiding tobacco, being physically active, maintaining a weight appropriate for the individual, limiting alcohol, and eating foods rich in fiber, such as vegetables, fruits, beans, and whole grains.

Lifestyle changes do not remove an existing polyp and do not replace recommended surveillance.

Do not start aspirin or another medicine solely to prevent polyps without discussing it with a clinician. Potential benefits must be weighed against risks such as stomach or intestinal bleeding.

## Complications

The main concern is that certain adenomas and serrated lesions can progress to colorectal cancer. This does not happen to every precancerous polyp. Risk is generally higher with larger polyps, multiple polyps, certain tissue patterns, or high-grade dysplasia. Dysplasia means abnormal cell development; high-grade dysplasia indicates more advanced changes but is not the same as invasive cancer.

Some polyps bleed slowly. Ongoing blood loss can cause iron-deficiency anemia, leading to fatigue, weakness, or shortness of breath. Rarely, a very large polyp can contribute to bowel blockage.

Polyp removal is generally safe, but complications can occur. These include bleeding, a tear or hole in the colon called a perforation, and reactions to sedation. Bleeding may begin immediately or several days after removal, especially after treatment of a larger lesion.

After a colonoscopy, mild bloating or cramping can occur for a short time. Follow the procedure team's instructions about food, activity, and medicines. Seek urgent medical attention for severe or worsening abdominal pain, fever, repeated vomiting, fainting, substantial rectal bleeding, passage of blood clots, chest pain, or difficulty breathing.

## Follow up

Follow-up colonoscopy is often called surveillance . Its purpose is to check for new polyps and confirm that certain large or complex lesions were completely removed.

The recommended timing depends on:

Under 2020 guidance from the U.S. Multi-Society Task Force, a person with one or two tubular adenomas smaller than 10 millimeters, completely removed during a high-quality examination, may be advised to repeat colonoscopy in 7 to 10 years. An advanced adenoma generally leads to a shorter interval, often 3 years. One or two small sessile serrated lesions may lead to follow-up in 5 to 10 years. Larger, more numerous, incompletely removed, or piecemeal-removed lesions may require earlier evaluation.

These intervals are examples, not personal recommendations. Guidance can differ outside the United States, and individual findings may change the plan. The endoscopist may initially give a provisional interval and update it after the pathology results return.

Contact the medical office if no pathology result or follow-up plan is received. Routine follow-up is also an opportunity to review family history, since a new cancer or advanced polyp in a close relative may affect future screening.

Do not wait for a planned surveillance visit if new rectal bleeding, persistent bowel changes, or symptoms of anemia develop. These concerns should be discussed sooner.

- The number and size of polyps
- Whether they were adenomas, serrated lesions, or another type
- Whether advanced microscopic changes were present
- Whether removal was complete
- The quality of the bowel preparation and examination
- Personal and family history
- Inflammatory bowel disease or an inherited cancer syndrome

## Sources

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