CONDITION

Small intestine cancer

Small intestine cancer begins when abnormal cells grow uncontrollably in the part of the digestive tract between the stomach and colon.

WHAT IT IS
Cancer arising in tissues of the small intestine

BODY SYSTEM
Digestive system

MAIN SYMPTOMS
Abdominal pain, vomiting, bleeding, unexplained weight loss

WHAT CAUSES IT
Genetic cell changes; exact trigger often unknown

HOW IT IS DIAGNOSED
Imaging or endoscopy, confirmed by tissue biopsy

MAIN TREATMENT
Surgery and cancer-specific drug treatment

CAN IT BE CURED?
Sometimes - localized tumors may be fully removed

IS IT AN EMERGENCY?
Sometimes - severe pain, persistent vomiting, or heavy bleeding

LONG-TERM OUTLOOK
Best when localized; advanced cancers often need ongoing treatment

Overview

The small intestine, also called the small bowel, is the long tube that carries food from the stomach to the large intestine. It absorbs most nutrients from food. Its three sections are the duodenum, jejunum, and ileum.

Small intestine cancer begins when cells in this tube develop changes that make them grow out of control. It is less common than cancer of the colon or stomach.

Several types can occur:

These types can behave differently and require different treatments. The tumor's location, cell type, stage, and biological features all help determine what happens next.

Small tumors may be removable with surgery. Cancer that has spread beyond the small

intestine is less likely to be cured, but treatment may control it, ease symptoms, and help some people live longer.

- Adenocarcinoma begins in gland-forming cells lining the intestine
- Neuroendocrine tumor begins in cells that help control digestion and hormones
- Lymphoma begins in immune system cells
- Sarcoma , including gastrointestinal stromal tumor, begins in supporting tissues

Symptoms

Small intestine cancer may not cause symptoms at first. When symptoms occur, they can be vague and may resemble many non-cancerous digestive problems.

Possible symptoms include:

A growing tumor can narrow or block the intestine. This may cause worsening cramping, abdominal swelling, repeated vomiting, or difficulty passing stool or gas.

Some neuroendocrine tumors release hormones. If this happens, symptoms can include facial flushing, diarrhea, wheezing, or a rapid heartbeat. Many neuroendocrine tumors do not release enough hormones to cause these effects.

These symptoms do not mean that you have cancer. Persistent, unexplained, or worsening symptoms still need medical assessment.

- Pain or cramping in the abdomen
- Nausea or vomiting
- Feeling unusually full or bloated
- Unexplained weight loss or reduced appetite
- Tiredness, weakness, or breathlessness from anemia
- Blood in the stool or black, tar-like stool
- Yellowing of the skin or eyes when a tumor blocks bile drainage

Causes and risk factors

Small intestine cancer develops when genetic material within a cell becomes altered. This allows the cell to keep growing when it normally would stop or die. In most people, it is not possible to identify why those changes happened.

Certain conditions are associated with a higher risk:

Having a risk factor does not mean that cancer will develop. Some people diagnosed with small intestine cancer have no known risk factors.

The condition itself is not contagious. Most cases are not directly passed from parent to child, although an inherited cancer syndrome can be passed through a family.

- Crohn's disease , which causes long-term inflammation in the digestive tract
- Celiac disease , an immune reaction to gluten that damages the small intestine
- Familial adenomatous polyposis , an inherited condition that causes many intestinal polyps
- Lynch syndrome , an inherited condition that raises the risk of several cancers
- Peutz-Jeghers syndrome , an inherited condition that causes digestive tract polyps
- A previous small intestine tumor or certain other digestive cancers

Diagnosis

There is no routine screening test for small intestine cancer in people at average risk. Diagnosis often begins after symptoms, anemia, or an unexpected scan finding.

Blood tests may check for anemia, liver function, kidney function, and signs that nutrition has been affected. Blood tests alone cannot confirm the diagnosis.

Imaging may include a CT or MRI scan. Specialized CT or MRI enterography creates detailed images of the small intestine. A PET scan may sometimes help assess whether cancer has spread. The type of PET scan used can differ for neuroendocrine tumors.

Endoscopy uses a thin, flexible camera to look inside the digestive tract. A standard upper endoscopy can examine the duodenum, while a colonoscopy may reach the final part of the ileum. Balloon-assisted enteroscopy can examine deeper parts of the small intestine and collect tissue.

A capsule camera is swallowed and takes pictures as it passes through the bowel. It cannot take a biopsy. It may also be unsuitable if a blockage is suspected because the capsule could become trapped.

A biopsy removes a small tissue sample for examination under a microscope. This usually confirms whether cancer is present and identifies its type. Sometimes the diagnosis is confirmed only after surgery.

Further scans and laboratory testing establish the stage and look for features that may affect

treatment. Stage describes the tumor's size, nearby lymph node involvement, and whether it has spread to another organ.

Treatment and management

Treatment is based on the exact cancer type, its location and stage, whether surgery can remove it, and your overall health and priorities. Because this cancer is uncommon, care may involve a team with experience in small intestine tumors.

Surgery is the main treatment for many localized tumors. The surgeon removes the affected section of intestine and reconnects the healthy ends. Nearby lymph nodes may also be removed. A duodenal tumor close to the pancreas may require a larger operation that removes parts of several nearby organs.

Further treatment after surgery may be considered when there is a meaningful risk of cancer returning. The benefits and side effects are weighed for each situation.

Drug treatment differs by tumor type:

Testing the tumor for specific genetic or molecular features can sometimes identify a targeted treatment or immunotherapy option. These treatments are not appropriate for every tumor.

Radiation therapy has a more limited role than surgery or drug treatment, but it may be used in selected situations to control a tumor or relieve symptoms.

Supportive care can be given at any stage. It may include pain relief, treatment for nausea or anemia, nutrition support, and procedures to relieve a blockage. Palliative care focuses on comfort and quality of life and can be provided alongside cancer treatment.

- Small bowel adenocarcinoma may be treated with chemotherapy
- Neuroendocrine tumors may be treated with hormone-blocking medicines, targeted drugs, chemotherapy, or peptide receptor radionuclide therapy
- Lymphoma is usually treated with medicines that work throughout the body
- Gastrointestinal stromal tumors may respond to targeted drugs called tyrosine kinase inhibitors

Complications

The cancer or its treatment may cause:

Surgery can occasionally lead to long-term diarrhea or difficulty absorbing nutrients, especially

if a substantial length of intestine is removed. Treatment teams can check for vitamin deficiencies, dehydration, and weight loss.

- Partial or complete bowel obstruction
- Slow bleeding and iron-deficiency anemia
- Heavy digestive tract bleeding
- A hole in the intestine, called a perforation
- Poor nutrient absorption or unintended weight loss
- Spread to the liver, abdominal lining, lymph nodes, or other organs

Prevention

There is no known way to prevent most small intestine cancers. Many cases occur without a clear or controllable cause.

Inherited syndromes cannot be prevented. If one is present in your family, genetic counseling can help explain your own risk and whether genetic testing or planned surveillance may be appropriate. Surveillance aims to find changes earlier; it does not guarantee that cancer will be prevented.

People with Crohn's disease or celiac disease should continue their usual follow-up. New or changing symptoms should not automatically be assumed to come from the existing condition.

Living with it and what to expect

What happens over months and years is strongly influenced by the cancer type and stage. A completely removed localized tumor may require no immediate treatment beyond recovery and follow-up. Follow-up commonly includes appointments, symptom review, examination, blood tests, and scans chosen for the specific tumor.

Cancer can return after treatment, so keeping follow-up appointments matters even when you feel well. New symptoms between appointments can also be reported rather than saved until the next scheduled visit.

Some neuroendocrine tumors grow slowly and may be managed for years. Other small intestine cancers behave more quickly. Cancer that has spread may require treatment in cycles or a change of treatment if it begins growing again.

After surgery, eating may be difficult for a while. Smaller meals can be easier during recovery.

Some people develop diarrhea or need vitamin and mineral monitoring, while others return to a broadly normal diet. A dietitian can help if you are losing weight or avoiding many foods.

Many people continue work, family activities, and exercise during or after treatment, although fatigue and appointments may require adjustments. Emotional support, rehabilitation, and practical financial or workplace advice can also form part of cancer care.

When to get medical help

Arrange a routine medical appointment if you have persistent abdominal discomfort, unexplained weight loss, repeated nausea, a lasting change in bowel habits, unusual tiredness, or possible blood in your stool. These symptoms often have causes other than cancer, but they should be assessed if they continue or worsen.

If you are receiving treatment, contact your cancer team promptly about a fever, uncontrolled diarrhea, repeated vomiting, increasing pain, poor fluid intake, or side effects that are difficult to manage. Use the urgent contact instructions provided by your treatment team.

Seek emergency care for:

These may indicate bowel obstruction, major bleeding, perforation, or another serious complication.

- Severe or rapidly worsening abdominal pain
- A swollen abdomen with an inability to pass stool or gas
- Persistent vomiting or an inability to keep fluids down
- Vomiting blood, heavy rectal bleeding, or black tar-like stool with weakness
- Fainting, confusion, severe breathlessness, or cold and clammy skin

Common questions

Is small intestine cancer curable?

Sometimes. Surgery may cure a localized tumor that can be removed completely. Cure is less likely once cancer has spread to distant organs, although treatment may still shrink or control it. The tumor type and its response to treatment also matter.

What are the first signs of small intestine cancer?

Early signs may include mild abdominal pain, nausea, tiredness from anemia, or unexplained weight loss. Some people have no early symptoms. Because these signs are not specific to

cancer, testing is needed to find their cause.

Will small intestine cancer show up on a colonoscopy?

Usually not. A colonoscopy examines the large intestine and may see only the final short section of the small intestine. Tumors elsewhere may require CT or MRI imaging, upper endoscopy, capsule imaging, or balloon-assisted enteroscopy.

How fast does small intestine cancer spread?

There is no single rate. Some neuroendocrine tumors grow slowly, while certain adenocarcinomas, lymphomas, or sarcomas may progress more quickly. Scans, biopsy findings, tumor grade, and changes over time provide more useful information than the location alone.

Can I eat normally after small intestine surgery?

Many people gradually return to a varied diet, but recovery differs with the amount and location of intestine removed. Temporary smaller meals may help. Longer-term diarrhea, weight loss, or vitamin deficiencies can occur after more extensive surgery and may need dietary or medical support.

Is small intestine cancer the same as colon cancer?

No. Both affect the digestive tract, but they begin in different organs. Their common cell types, staging systems, operations, and drug treatments are not always the same.

Sources

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