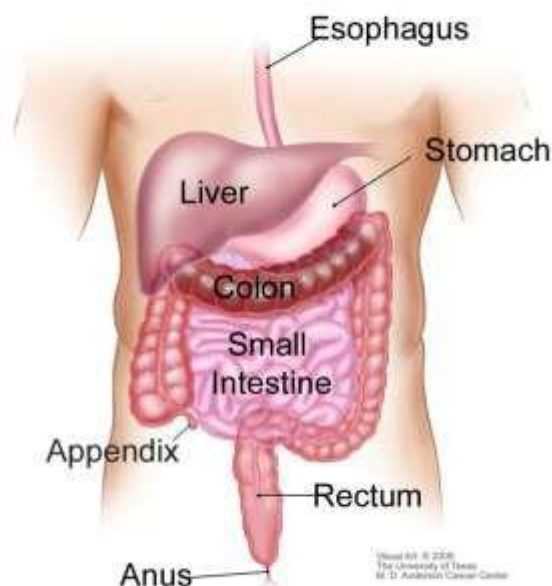


## Appendiceal Cancer

### What is appendiceal cancer?

Cancer of the appendix, also called appendiceal cancer, is a relatively rare cancer in the gastrointestinal (GI) system that accounts for less than 0.5 percent of all gastrointestinal cancers. The appendix is a tube-like structure three to six inches long that is attached to the colon. It is located in the lower right part of the abdomen and serves no known purpose.

Appendiceal cancers are usually found after patients have surgery for acute appendicitis or when an abdominal mass is seen on a computerized tomography (CT) scan for an unrelated condition. There are two main types of appendiceal cancer: carcinoid and non-carcinoid epithelial tumors.



Appendix and nearby

Carcinoid tumors are the most common form of appendiceal cancers and rarely spread to other parts of the body. While most patients have no symptoms, some patients may have what is called carcinoid syndrome if the cancer has spread to the liver. Carcinoid syndrome includes flushing of the skin, shortness of breath and diarrhea.

This document explains epithelial tumors which can range from non-cancerous tumors to aggressive and relatively fast-growing cancerous tumors. These tumors develop from the epithelial cells lining the inside of the appendix and are slow-growing. They rarely spread beyond the abdominal cavity (area of the body containing the stomach, spleen, liver, gallbladder, pancreas, small intestine, kidneys, ureters and most of the colon). Most of the cells creating these tumors produce a jelly-like material known as mucin. Over time, the tumor cells and mucin may spread within the abdominal cavity. If left untreated, the tumor cells and mucin build up. This build up can cause a bowel obstruction, weight loss, muscle loss and loss of appetite.

## What are the risk factors for appendiceal cancer?

A risk factor is anything that increases the chance of developing a specific cancer. There are no known risk factors for appendiceal cancer, nor is there a significant risk of inheriting this type of cancer from a blood relative. However, some people with appendiceal cancer may develop or have had other cancers such as lymphoma, melanoma (skin cancer) and/or colon cancer.

## How is appendiceal cancer diagnosed?

Common symptoms may include fatigue, loss of appetite and weight loss. Other symptoms may include a bloated feeling, quickly feeling full after eating, difficult bowel movements, frequent urination, shortness of breath and sometimes an increased heart rate, abdominal and lower back pain, indigestion, reflux, gas, nausea and/or vomiting. Due to pressure on the groin area from the cancer, a hernia may develop.

Cancer of the appendix is commonly found:

- After the patient is treated for symptoms of suspected appendicitis.
- During surgery to repair a hernia.
- During surgery for another reason.
- When the patient is treated for unexplained bloating around the abdomen.

## What is staging?

After your cancer is diagnosed, other tests and exams are done to determine the extent of the cancer. This process is called staging. Staging determines the size of the cancerous tumor and whether the disease has spread to other parts of the body. Your doctor needs to know the stage of the disease in order to plan the best treatment for you.

A CT scan and previous pathology and surgical reports are most commonly used to determine the stage of the cancer. Depending on your case, your doctor may order additional tests. Because these tumors are often slow-growing, positron emission tomography (PET) scans are not helpful to determine the stage of this cancer.

## How is appendiceal cancer treated?

Only a few cancer centers in the United States see a large number of patients with appendiceal cancer. The preferred treatment by these centers, including MD Anderson, is a surgical procedure called cytoreductive surgery (tumor debulking) combined with heated intraperitoneal chemotherapy (HIPEC). During surgery chemotherapy is delivered into the open abdomen to help kill any remaining tumor cells by bathing all areas of the abdominal cavity. The surgery can involve removing involved organs such as part of the intestines, gallbladder, spleen, ovaries, uterus, or others. Your health care team will explain your treatment plan in detail with you. Some chemotherapy treatments are borrowed from colon cancer regimens. Other treatment options are being studied.

If caught at an early stage appendiceal cancer can be treated with surgery alone. Types of surgeries include

**Appendectomy** - The removal of the appendix and is usually the only treatment needed if the tumor is smaller than 1.5 centimeters.

**Hemicolectomy** - The removal of a portion of the colon next to the appendix, nearby blood vessels and lymph nodes. This is usually used for a tumor larger than 2 centimeters.

### **Managing Side Effects**

Fluid may build up in the abdominal cavity. If appropriate, the fluid will be removed. If palliative (comfort) care is required, a G-tube and/or J-tube may be inserted. A G-tube is used to deflate the stomach and a J-tube provides nutrition. Another palliative measure may be to surgically remove any tumor cell material.

Pain can be controlled with appropriate medicines. Tell your doctor if you feel pain.

If you develop a deep vein thrombosis (blood clot), you will receive medicine to treat it.

Routine blood work is needed to make sure your electrolytes and blood counts are normal, and your liver and kidneys are functioning properly. Stay well hydrated by drinking plenty of water. You will have a CT scan periodically to assess if the tumor has progressed, how the tumor is responding to treatment and other issues.

Good nutrition is important and will be discussed with you as needed.