Appendix Cancer - Treatment Options [1]

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ON THIS PAGE: You will learn about the different ways doctors use to treat people with this type of cancer. To see other pages, use the menu on the side of your screen.

This section outlines treatments that are the standard of care (the best known treatments available) for this specific type of cancer. When making treatment plan decisions, patients are also encouraged to consider clinical trials as an option. A clinical trial is a research study to test a new approach to treatment to evaluate whether it is safe, effective, and possibly better than the standard treatment. Clinical trials may test such approaches as a new drug, a new combination of standard treatments, or new doses of current therapies. Your doctor can help you review all treatment options. For more information, see the About Clinical Trials [3] and Latest Research [4] sections.

Treatment overview

In cancer care, different types of doctors often work together to create a patient?s overall treatment plan that combines different types of treatments. This is called a multidisciplinary team [5]. Cancer care teams also include a variety of other health care professionals, including physician assistants, oncology nurses, social workers, pharmacists, counselors, dietitians, and others.

Listed below are descriptions of the most common treatment options for appendix cancer that is not a carcinoid tumor. Find treatment information for carcinoid tumors of the appendix [6], in another section of this website.

Treatment options and recommendations depend on several factors, including the type and stage of cancer, possible side effects, and the patient?s preferences and overall health. Your care plan may also include treatment for symptoms and side effects, an important part of cancer care. Take time to learn about all of your treatment options and be sure to ask questions about things that are unclear. Also, talk about the goals of each treatment with your doctor and what you can expect while receiving the treatment. Learn more about making treatment decisions [7].

Surgery

Surgery is the removal of the tumor and some surrounding healthy tissue during an operation. It is the most common treatment for appendix cancer. Most often, appendix cancer is low-grade (see Stages and Grades [8]) and, therefore, slow-growing. Often it can be successfully treated with surgery alone. A surgical oncologist is a doctor who specializes in treating cancer using surgery.

Types of surgeries for appendix cancer include:

- **Appendectomy**. An appendectomy is the surgical removal of the appendix. It is usually the only treatment needed for an appendix carcinoid tumor smaller than 1.5 centimeters (cm).

  If appendix carcinoid cancer is discovered unexpectedly after an appendectomy that was performed for what was originally thought to have been appendicitis, a second operation to remove more tissue using surgical techniques (described below) is often recommended.

- **Hemicolectomy**. For a carcinoid tumor larger than 2 cm or appendix cancers that are not carcinoid, a hemicolectomy may be recommended. This is the removal of a portion of the colon next to the appendix. Removal of nearby blood vessels and lymph nodes is often done at the same time. A right hemicolectomy is surgery performed on the right side of the colon. Even though a large amount of the large intestine is removed, the operation usually does not result in the need for a colostomy or stoma [9], which is an opening in the abdomen through which the bowel contents are emptied into a bag.

- **Debulking surgery**. For later-stage appendix cancer, debulking (or cytoreduction) surgery may be performed. In this surgery, the doctor removes as much of the tumor ?bulk? as possible, which can benefit the patient even though it will not remove every cancer cell from the body. Sometimes, debulking surgery will be followed with chemotherapy (see below) to destroy remaining cancer cells.

  When the tumor produces mucous, much of the bulk of the abnormal tissue often is not cancer but is due to accumulation of the mucous. The mucous looks like jelly, and this condition is often referred to as ?jelly belly.? Removing the mucous from the abdomen can often relieve a patient?s symptoms of bloating.

- **Removal of the peritoneum**. There is some controversy about the extent of surgery that is necessary in patients with slow-growing, low-grade appendix cancer that has spread beyond the colon to involve other areas of the abdomen. Some surgeons recommend aggressive surgery that includes the removal of the peritoneum (the lining of the abdomen) to remove as much of the cancer as possible. This type of surgery is also called a peritonectomy.

In patients with a very slow-growing tumor, such surgery can be effective in removing the majority of the cancer cells. This can benefit the patient by reducing the amount of cancer, even if it does not remove every cancer cell. However, it is a difficult operation that can have significant side effects. The doctor will consider many different factors, such as the patient?s age and overall health, before recommending this extensive surgery. Patients should talk with a specialist with expertise in this type of procedure beforehand.

Learn more about the basics of cancer surgery [10].

Chemotherapy

Chemotherapy is the use of drugs to destroy cancer cells, usually by stopping the cancer cells? ability to grow and divide. Chemotherapy is given by a medical oncologist, a doctor who specializes in treating cancer with medication. For appendix cancer that is not a carcinoid tumor, chemotherapy is most often used soon after surgery when cancer is found outside of the appendix region. It may also be given for a non-carcinoid appendix cancer after surgery to prevent the cancer from coming back, depending on the stage of disease. There are different types of chemotherapy, depending on how the drugs are delivered to the body:

- **Local/intraperitoneal chemotherapy**. For local chemotherapy, the medication delivery is focused on one area or section of the body. This is the most common type of chemotherapy used in the treatment of appendix cancer. More specifically, it is called intraperitoneal chemotherapy, which is chemotherapy that is given directly into the abdominal cavity. Typically, the surgeon will try to remove as much of the tumor as possible (debulking surgery, see above) and then insert a tube in the abdomen through which chemotherapy can be given after the operation. In some cases, the chemotherapy is warmed above body temperature to increase its ability to penetrate the tissue that may be lined with tumor cells; this is called hyperthermic (or heated) intraperitoneal chemotherapy. Once chemotherapy is completed, the tube is removed, generally without the need for another operation.

- **Systemic chemotherapy.** This type of chemotherapy gets into the bloodstream to reach cancer cells throughout the body. This can be done using an intravenous (IV) tube, which is a tube placed into a vein using a needle or in a pill or capsule that is swallowed (orally). Some people may receive this type of chemotherapy in their doctor?s office or outpatient clinic; others may go to the hospital.

A chemotherapy regimen (schedule) usually consists of a specific number of cycles given over a set period of time. A patient may receive one drug at a time or combinations of different drugs at the same time. Specific drugs given in systemic chemotherapy for non-carcinoid appendix cancers are similar to those for colorectal cancer and can include fluorouracil (5-FU, Adrucil), leucovorin (Wellcovorin), capecitabine (Xeloda), irinotecan (Camptosar), oxaliplatin (Eloxatin), bevacizumab (Avastin), ziv-aflibercept (Zaltrap), ramucirumab (Cyramza), cetuximab (Erbitux), and panitumumab (Vectibix).

For chemotherapy for carcinoid tumors, see more information about carcinoid tumors in the Overview section. [11]

The side effects of chemotherapy depend on the individual and the dose used, but they can include fatigue, risk of infection, nausea and vomiting, hair loss, loss of appetite, and diarrhea. These side effects usually go away when treatment is finished.

Learn more about the basics of chemotherapy [12] and preparing for treatment [13]. The medications used to treat cancer are continually being evaluated. Talking with your doctor is often the best way to learn about the medications prescribed for you, their purpose, and their potential side effects or interactions with other medications. Learn more about your prescriptions by using searchable drug databases [14].

Radiation therapy

Radiation therapy is the use of high-energy x-rays or other particles to destroy cancer cells. A doctor who specializes in giving radiation therapy to treat cancer is called a radiation oncologist. A radiation therapy regimen (schedule) usually consists of a specific number of treatments given over a set period of time.

Radiation therapy is rarely used in the treatment of appendix cancer. However, sometimes it may be used to treat a particular area when the cancer has spread (such as the bone) to help relieve symptoms (see below.)

Side effects from radiation therapy may include fatigue, mild skin reactions, upset stomach, and loose bowel movements. Most side effects go away soon after treatment is finished.

Learn more about the basics of radiation therapy [15].

Getting care for symptoms and side effects

Cancer and its treatment often cause side effects. In addition to treatment to slow, stop, or eliminate the cancer, an important part of cancer care is relieving a person?s symptoms and side effects. This approach is called palliative or supportive care, and it includes supporting the patient with his or her physical, emotional, and social needs.

Palliative care is any treatment that focuses on reducing symptoms, improving quality of life, and supporting patients and their families. Any person, regardless of age or type and stage of cancer, may receive palliative care. It works best when palliative care is started as early as needed in the cancer treatment process. People often receive treatment for the cancer and treatment to ease side effects at the same time. In fact, patients who receive both often have less severe symptoms, better quality of life, and report they are more satisfied with treatment.

Palliative treatments vary widely and often include medication, nutritional changes, relaxation techniques, emotional support and other therapies. You may also receive palliative treatments similar to those meant to eliminate the cancer, such as chemotherapy, surgery, or radiation therapy. Talk with your doctor about the goals of each treatment in your treatment plan.

Before treatment begins, talk with your health care team about the possible side effects of your specific treatment plan and palliative care options. And during and after treatment, be sure to tell your doctor or another health care team member if you are experiencing a problem so it can be addressed as quickly as possible. Learn more about palliative care [16].

Metastatic appendix cancer

If cancer has spread to another location in the body, it is called metastatic cancer.

Patients with this diagnosis are encouraged to talk with doctors who are experienced in treating this stage of cancer, because there can be different opinions about the best treatment plan. Learn more about getting a second opinion [17] before starting treatment, so you are comfortable with the treatment plan chosen. This discussion may include clinical trials [3].

Your health care team may recommend a treatment plan that includes a combination of surgery, chemotherapy, and radiation therapy. Palliative care will also be important to help relieve symptoms and side effects.

For most patients, a diagnosis of metastatic cancer is very stressful and, at times, difficult to bear. Patients and their families are encouraged to talk about the way they are feeling with doctors, nurses, social workers, or other members of the health care team. It may also be helpful to talk with other patients, including through a support group.

Remission and the chance of recurrence

A remission is when cancer cannot be detected in the body and there are no symptoms. This may also be called having ?no evidence of disease? or NED.

A remission may be temporary or permanent. This uncertainty causes many people to worry that the cancer will come back. While many remissions are permanent, it?s important to talk with your doctor about the possibility of the cancer returning. Understanding your risk of recurrence and the treatment options may help you feel more prepared if the cancer does return. Learn more about coping with the fear of recurrence [18].

If the cancer does return after the original treatment, it is called recurrent cancer. It may come back in the same place (called a local recurrence), nearby (regional recurrence), or in another place (distant recurrence).

When this occurs, a cycle of testing will begin again to learn as much as possible about the recurrence. After testing is done, you and your doctor will talk about your treatment options. Often the treatment plan will include the treatment described above such as surgery, chemotherapy, and radiation therapy, but they may be used in a different combination or given at a different pace. Your doctor may also suggest clinical trials that are studying new ways to treat this type of recurrent cancer. Whichever treatment plan you choose, palliative care will be important for relieving symptoms and side effects.

People with recurrent cancer often experience emotions such as disbelief or fear. Patients are encouraged to talk with their health care team about these feelings and ask about support services to help them cope. Learn more about dealing with cancer recurrence [19].

If treatment fails

Recovery from cancer is not always possible. If treatment is not successful, the disease may be called advanced or terminal cancer.

This diagnosis is stressful, and advanced cancer is difficult to discuss for many people. However, it is important to have open and honest conversations with your doctor and health care team to express your feelings, preferences, and concerns. The health care team is there to help, and many team members have special skills, experience, and knowledge to support patients and their families. Making sure a person is physically comfortable and free from pain is extremely important.

Patients who have advanced cancer and who are expected to live less than six months may want to consider a type of palliative care called hospice care. Hospice care is designed to provide the best possible quality of life for people who are near the end of life. You and your family are encouraged to think about where you would be most comfortable: at home, in the hospital, or in a hospice environment. Nursing care and special equipment can make staying at home a workable alternative for many families. Learn more about advanced cancer care planning [20].

After the death of a loved one, many people need support to help them cope with the loss. Learn more about grief and loss [21].

The next section in this guide is About Clinical Trials [3] *and it offers more information about research studies that are focused on finding better ways to care for people with cancer. Or, use the menu on the side of your screen to choose another section to continue reading this guide.*

Links:

[1] http://www.cancer.net/cancer-types/appendix-cancer/treatment-options
[2] http://www.cancer.net/about-us
[3] http://www.cancer.net/node/18482
[4] http://www.cancer.net/node/18485
[5] http://www.cancer.net/node/25356
[6] http://www.cancer.net/node/18652
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