

Parathyroid Cancer - Treatment Options [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 12/2014

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

This section outlines treatments that are the standard of care, which are the best proven treatments available for this specific type of tumor. 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 doctors can help you review all treatment options. For more information, see the [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].

The most common treatment options for a parathyroid tumor are surgery, radiation therapy, and treatment of [hypercalcemia](#) [6]. Chemotherapy may also be recommended. Treatment will include efforts to both eliminate the tumor and control the amount of calcium in the patient's bloodstream.

Descriptions of these common treatment options are listed below. Treatment options and recommendations depend on several factors, including the type and stage of the tumor, 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 your 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].

Treating hypercalcemia

There are a number of medications used to reduce calcium levels in the blood, including

bisphosphonates (Aredia, Bonefos, Loron), calcitonin (Calcimar, Cibacalcin, Miacalcin), gallium nitrate (Ganite), plicamycin (Mithramycin), or zoledronic acid (Zometa). Most of these drugs are only used for short periods of time until treatment to remove the tumor can be started.

Surgery

Surgery is the removal of the tumor and surrounding tissue during an operation.

Surgery is the primary treatment for a parathyroid tumor, regardless of whether the tumor is benign or cancerous. A surgical oncologist is a doctor who specializes in treating a tumor using surgery.

It is difficult to know before surgery whether a parathyroid tumor is benign or malignant. Therefore, the surgeon needs to remove the entire gland and any tissue that looks abnormal. In addition, because parathyroid tissue is very likely to implant in the surgical bed, the area where tissue was removed during surgery, it is important for the surgeon to remove the tumor, any abnormal tissue, and a clean margin, which is tissue around the tumor that is disease-free. The doctor may also recommend radiation therapy after surgery to the affected area of the neck. See below for more information on radiation therapy.

Surgery for a benign parathyroid tumor is called a parathyroidectomy. Talk with your surgeon about the role of minimally invasive surgery for a single-gland tumor that is strongly believed to be benign.

Surgery for parathyroid cancer is more extensive and includes the complete removal of the parathyroid gland as well as surrounding tissues such as the nearby thyroid gland, adjoining fatty tissues, lymph nodes, and if possible, the surrounding muscles.

If a surgeon finds the tumor is benign during surgery, it is common to check the patient's level of parathyroid hormone in the blood during the operation. If necessary, the surgeon will then re-implant one of the normal parathyroid glands that had been removed earlier in the operation. However, if the tumor is cancerous, re-implantation should not be done to avoid any chance of putting cancer cells back into the body.

Talk with your surgeon before the operation about what to expect, the amount of recovery time, and the possible short- and long-term side effects. Learn more about [cancer surgery](#) [8].

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, which is your treatment plan, usually consists of a specific number of treatments given over a set period of time.

Occasionally, radiation therapy may be recommended after surgery for parathyroid cancer. Radiation therapy may help reduce the risk of parathyroid cancer recurring in the neck, but it is difficult to evaluate whether this treatment is beneficial because this type of cancer is so rare.

Side effects from radiation therapy may include fatigue, mild skin reactions, upset stomach, and loose bowel movements. Talk with your doctor about how side effects can be relieved or managed during treatment. Most side effects go away soon after treatment has finished. Learn more about [radiation therapy](#) [9].

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.

Systemic chemotherapy is delivered through the bloodstream to reach cancer cells throughout the body. Common ways to give chemotherapy include an intravenous (IV) tube placed into a vein using a needle or in a pill or capsule that is swallowed. A chemotherapy regimen 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.

Chemotherapy is rarely effective at treating metastatic or recurrent parathyroid cancer. More clinical trials are needed.

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 once treatment is finished.

Learn more about [chemotherapy](#) [10] and [preparing for treatment](#) [11]. The medications used to treat tumors 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](#) [12].

Getting care for symptoms and side effects

Parathyroid cancer and its treatment often cause side effects, such as hypercalcemia, described above. 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 can help a person at any stage of illness. 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, and other therapies. You may also receive palliative treatments similar to those meant to eliminate the cancer, such as chemotherapy, surgery, and radiation therapy. Talk with your doctor about the goals of each treatment in the treatment plan.

Before treatment begins, talk with your health care team about the possible side effects of your specific treatment plan and supportive 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 is addressed as quickly as possible. Learn more about [palliative care](#) [13].

Metastatic parathyroid 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 seeking a [second opinion](#) [14] before starting treatment, so you are comfortable with the treatment plan chosen. This discussion may include [clinical trials](#) [15].

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

For many patients, a diagnosis of metastatic cancer can be 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 "no evidence of disease" or NED.

A remission can be temporary or permanent. This uncertainty leads to many survivors feeling worried or anxious that the tumor will come back. While many remissions are permanent, it's important to talk with your doctor about the possibility of the tumor returning. Understanding the risk of recurrence and the treatment options may help you feel more prepared if it does return. Learn more about [coping with the fear of recurrence](#) [16].

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

The first sign of recurrence after treatment may be high blood calcium levels. Therefore, tests to watch for a recurrence include blood tests for PTH and calcium level changes, as well as ultrasounds of the neck. See the [Diagnosis section](#) [17] for descriptions.

If a recurrence is detected, the cycle of testing will begin again to learn as much as possible

about the tumor. After testing is done, you and your doctor will talk about your treatment options. Often the treatment plan will include the therapies 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 tumor.

People with recurrent disease 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 recurrence](#) [18].

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 this 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](#) [19].

After the death of a loved one, many people need support to help them cope with the loss. Learn more about [grief and loss](#) [20].

The next section helps explain clinical trials, which are research studies. Use the menu on the side of your screen to select About Clinical Trials, or you can select another section, to continue reading this guide.

Links:

- [1] <http://www.cancer.net/cancer-types/parathyroid-cancer/treatment-options>
- [2] <http://www.cancer.net/about-us>
- [3] <http://www.cancer.net/node/19516>
- [4] <http://www.cancer.net/node/19519>
- [5] <http://www.cancer.net/node/25356>
- [6] <http://www.cancer.net/node/25255>
- [7] <http://www.cancer.net/node/24582>
- [8] <http://www.cancer.net/node/24462>
- [9] <http://www.cancer.net/node/24728>
- [10] <http://www.cancer.net/navigating-cancer-care/how-cancer-treated/chemotherapy/what-chemotherapy>
- [11] <http://www.cancer.net/node/24473>
- [12] <http://www.cancer.net/node/25369>
- [13] <http://www.cancer.net/node/25282>

- [14] <http://www.cancer.net/node/25355>
- [15] <http://www.cancer.net/node/24863>
- [16] <http://www.cancer.net/node/25241>
- [17] <http://www.cancer.net/node/19513>
- [18] <http://www.cancer.net/node/25042>
- [19] <http://www.cancer.net/node/25113>
- [20] <http://www.cancer.net/node/25111>