Thyroid Cancer

What is the thyroid gland?
Your thyroid is a butterfly shaped gland in your neck. Your thyroid gland uses iodine to make many of its hormones.

Are there different types of thyroid cancer?
The following are the different types of thyroid cancer:

- **Papillary thyroid cancer** and **follicular thyroid cancer** are the most common types of thyroid cancer. These cancers grow slowly and are easy to treat if found early and if you are younger than 45 years old.

- **Medullary thyroid cancer (MTC)** is not as common and can be controlled if the cancer is treated before it spreads to other parts of your body.

- **Anaplastic thyroid cancer** is very rare and grows fast, which makes it hard to treat.

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

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What are the risk factors for thyroid cancer?

The following factors may increase your chance of thyroid cancer:

- **Radiation** - being exposed to high levels of radiation, including x-rays and CT scans, can increase your risk of thyroid cancer. Another type of radiation that can cause thyroid cancer is from radioactive fallout, called radioactive iodine (I-131). This includes radiation from atomic weapon testing and problems at nuclear power plants, and atomic weapons production plants.

- **Family history** - MTC can be caused by a change, or mutation, in your RET gene. Genes are passed down from one of your parents. A blood test can find this mutation. If found, your doctor may order more blood tests or do surgery to remove your thyroid. This abnormal gene may put you at risk for other types of cancer.

- **Gender** - Women are about 3 times more likely to have thyroid cancer.

- **Age** - Thyroid cancer is more common in people over the age of 40. The risk of anaplastic thyroid cancer increases above the age of 65.

- **Race** - White, Caucasians are more likely to develop thyroid cancer.

- **A diet low in iodine** - Your thyroid glands need iodine to make hormones. Low iodine can increase your risk of thyroid cancers. In the United States, iodine is added to salt and other foods to protect you from thyroid problems.

It is important to talk with your doctor about your health and any risk factors you have for thyroid cancer.

What are the symptoms of thyroid cancer?

Early thyroid cancer often does not have symptoms. As cancer grows, symptoms can develop. These may include:

- A lump, or nodule, in the front of your neck
- Hoarseness or difficulty talking in a normal voice
- Swollen lymph nodes, especially in your neck
- Difficulty swallowing or breathing
- Pain in your throat or neck

These symptoms can also be caused by other health conditions. It is important to talk with your doctor if you have any of these problems.
How does my doctor check for thyroid cancer?

Your doctor may do a physical exam and ask you about your personal and family medical history. The following tests may be ordered to check your thyroid:

- **Blood tests** - check your thyroid hormone levels.
- **Radioactive iodine scan** - takes pictures of any unusual lumps on your thyroid.
- **Ultrasound scan** - takes pictures of any unusual lumps on your thyroid. These pictures can show the number of lumps, the size of lumps, and if the lumps are filled with fluid or solid tissue.
- **Fine needle aspiration** - uses a thin needle to remove a small sample of thyroid tissue. A special doctor, a pathologist, looks at the tissue sample under a microscope to check for cancer cells.

What are the treatments for thyroid cancer?

Treatment for thyroid cancer depends on the type and the stage of your cancer. Your doctor will talk with you about what treatment option is best for you. You may have more than one treatment. Treatment options for thyroid cancer include:

- **Surgery** - removes the area of cancer in your thyroid gland and in any of your nearby tissue, such as your lymph nodes. This is the primary form of treatment for thyroid cancer. Your surgeon may remove half or all of your thyroid and your nearby lymph nodes.
- **Iodine 131 (I-131) Treatment** - destroys any thyroid cancer cells that are not removed by surgery or is used to treat cancer that has spread outside your thyroid gland. I-131 only attaches to thyroid cancers cells.
- **Thyroid hormone replacement** - used after surgery or I-131 treatment. This is given as a pill you take by mouth each day.

If your thyroid cancer has spread to other areas of your body, your doctor may talk to you about other types of treatment, including chemotherapy, radioactive iodine or external radiation therapy and other surgery.

Regular follow-up care is very important after treatment for thyroid cancer. This care may include routine physical exams, scans and blood tests.