

Medullary Thyroid Cancer **FAQ**

This page and its contents are Copyright © 2018 the American Thyroid Association®

WHAT IS THE THYROID GLAND?

The thyroid gland located in the neck produces thyroid hormones which help the body use energy, stay warm and keep the brain, heart, muscles, and other organs working normally.

1 CAUSES

WHAT CAUSES MEDULLARY THYROID CANCER

Medullary Thyroid Cancer (MTC) accounts for 1%– 2% of thyroid cancers and originates from the parafollicular C cells of the thyroid gland. MTC can be hereditary or not inherited (called sporadic). Hereditary MTC is caused by a mutation in the RET proto-oncogene.

2 SYMPTOMS

WHAT ARE THE SYMPTOMS OF MEDULLARY THYROID CANCER?

Medullary thyroid cancer usually presents as a *lump (nodule)* in the thyroid that is felt by the patient or a medical provider. There may be no symptoms, but the mass may cause breathing or swallowing problems, or hoarseness.

3 DIAGNOSIS

HOW IS MEDULLARY THYROID CANCER DIAGNOSED?

A diagnosis of thyroid cancer is usually made by a *fine needle aspiration (FNA)* biopsy of a thyroid nodule, or after the nodule is surgically removed. A blood test for the hormone calcitonin may also be helpful in diagnosing MTC in some cases.

4 TREATMENT

HOW IS MEDULLARY THYROID CANCER TREATED?

The primary treatment for MTC is *surgery* to remove the entire thyroid gland, and often lymph nodes in the neck. Unlike other types of thyroid cancer, MTC does not absorb iodine and radioactive iodine treatment is not useful.

If MTC has spread further than in the neck, surgery may reduce the cancer but not cure it. Other treatments (external beam radiation, or chemotherapy) may need to be used together with surgery. Promising new chemotherapeutic agents have been approved by the FDA for patients with advanced MTC. These drugs do not cure advanced MTC, but they can often slow down or partially reverse the growth of the cancer.

WHAT IS THE FOLLOW-UP FOR PATIENTS WITH MTC?

Follow-up examinations are essential for patients with MTC to do blood tests for calcitonin and CEA. Following thyroidectomy, it is hoped that calcitonin levels will be undetectable. When calcitonin or CEA is elevated, a neck ultrasound or other imaging tests may be used to look for a recurrence of MTC.

WHAT IS THE PROGNOSIS OF MEDULLARY THYROID CANCER?

The prognosis of MTC is usually not as favorable as the most common types of thyroid cancers. If discovered early however, surgery can be curative. MTC often progresses relatively slowly. A patient's survival depends on the cancer stage. Blood levels of calcitonin or CEA also can help predict a patient's prognosis.

FURTHER READING

Further details on this and other thyroid-related topics are available in the patient information section on the American Thyroid Association® website at www.thyroid.org.

