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Fine needle aspiration of the thyroid

Fine needle aspiration of the thyroid gland is a procedure to remove thyroid cells for examination. The thyroid gland is a butterfly-shaped gland located inside the front of the lower neck.

How the Test is Performed

This test may be done in your health care provider's office or in a hospital. Numbing medicine (anesthesia) may or may not be used. Because the needle is very thin, you may not need this medicine.

You lie on your back with a pillow under your shoulders with your neck extended. The biopsy site is cleaned. A thin needle is inserted into your thyroid, where it collects a sample of thyroid cells and fluid. The needle is then taken out. If your provider cannot feel the biopsy site, they may use ultrasound or a CT scan to guide where to put the needle. Ultrasound and CT scans are painless procedures that show images inside the body.

Pressure is applied to the biopsy site to stop any bleeding. The site is then covered with a bandage.

How to Prepare for the Test

Tell your provider if you have medicine allergies, bleeding problems, or are pregnant. Also, make sure your provider has a current list of all medicines you take, including herbal remedies and over-the-counter medicines.

A few days to a week before your biopsy, you may be asked to temporarily stop taking blood-thinning medicines. The medicines you may need to stop taking include:

- Aspirin
- Clopidogrel (Plavix)
- Ibuprofen (Advil, Motrin)
- Naproxen (Aleve, Naprosyn)
- Warfarin (Coumadin)

Be sure to talk with your provider before stopping any medicines.

How the Test will Feel

If numbing medicine is used, you may feel a sting as the needle is inserted and the medicine is injected.

As the biopsy needle passes into your thyroid, you may feel some pressure, but it should not be painful.

You may have slight discomfort in your neck afterward. You may also have slight bruising, which soon goes away.

Why the Test is Performed

This is a test to diagnose thyroid disease or thyroid cancer. It is often used to find out if thyroid nodules that your provider can feel or see on an ultrasound are noncancerous or cancerous.

Normal Results

A normal result shows the thyroid tissue looks normal and the cells do not appear to be cancer under a microscope.

What Abnormal Results Mean

Abnormal results may mean:

- Thyroid disease, such as goiter or thyroiditis
- Noncancerous tumors
- Thyroid cancer

Risks

The main risk is bleeding into or around the thyroid gland. With severe bleeding, there may be pressure on the windpipe (trachea). This problem is rare.

Alternative Names

Thyroid nodule fine needle aspirate biopsy; Biopsy - thyroid - skinny-needle; Skinny-needle thyroid biopsy; Thyroid nodule - aspiration; Thyroid cancer - aspiration

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