

Fine Needle Aspiration Biopsy of Thyroid Nodules **FAQ**

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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 OVERVIEW

What is a fine needle aspiration biopsy (FNA or FNAB) of a thyroid nodule?

A fine needle aspiration biopsy of a thyroid nodule is a simple and safe procedure to see if a nodule is benign or malignant.

2 PREPARING FOR YOUR PROCEDURE

How can you prepare for your thyroid FNA?

Most medications can be continued, though “blood thinners” often need to be stopped. Ask your doctors before stopping any medications or if you have any questions about your medications prior to the thyroid biopsy. Generally, no other preparation is necessary.

How is a thyroid FNA performed?

A thyroid FNA is done lying flat. After the neck is cleaned, a local anesthetic may be applied to reduce pain. A very thin needle is put through the skin and into the thyroid nodule, often using an ultrasound to ensure the needle is in the nodule. The needle is removed after several seconds, and a new needle is used for additional samples. After the biopsy is completed, the samples are sent to a pathologist who examines them under a microscope to make a diagnosis.

3 AFTER YOUR PROCEDURE

What should you expect after the procedure?

Most patients typically feel well after a thyroid biopsy. Some people will have mild neck discomfort at the site of the biopsy following the procedure. Tylenol® and ice compresses can be used to relieve discomfort.

What are the possible results?

Results of the thyroid biopsy are given as one of six possible diagnoses, according to the Bethesda System for Reporting Thyroid Cytopathology:

1. **Benign** – This accounts for most thyroid biopsies. These nodules generally do not need to be removed and can be monitored by ultrasound.
2. **Malignant (cancer)** – When a biopsy comes back as malignant, there is a 97-99% chance that it is truly a cancerous lesion. Almost all of these nodules will go to surgery (thyroidectomy), though monitoring the nodule without surgery (surveillance) can be an option in some circumstances.
3. **Suspicious for malignancy** – This occurs when there are worrisome features but the tissue sample is not diagnostic of cancer. The treatment is typically surgery.
4. **Atypia of Undetermined Significance (AUS) or Follicular Lesion of Undetermined Significance (FLUS)** – These specimens have some abnormal features, but the risk of cancer is still low. A repeat biopsy is often recommended.
5. **Follicular Neoplasm or ‘Suspicious for follicular neoplasm’** – This category occurs when it is difficult to tell if these nodules are benign or malignant based on the appearance of the cells alone. Surgery may be needed to make a diagnosis.
6. **Non-diagnostic** – These samples do not have sufficient findings to obtain a diagnosis. In these cases, a biopsy is usually repeated.

For more detailed information about thyroid nodule evaluations, please see the [Fine Needle Aspiration Biopsy of Thyroid Nodules](#) or [Thyroid Nodules brochures](#).

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.

