



Thyroid Fine Needle Aspiration Biopsy- FAQ

General Information

1. What is a thyroid fine needle aspiration biopsy?

A thyroid fine needle aspiration biopsy is a procedure in which a small hollow needle is used to obtain a small amount of tissue from your thyroid gland. Most often, this procedure is performed when a patient has one or more thyroid nodules.

2. What is the purpose of a thyroid fine needle aspiration biopsy?

The primary goal of the procedure is to help determine whether your thyroid nodule or nodules are benign (non-cancerous) or malignant (cancerous).

3. How long does this procedure typically take?

The procedure is generally performed in endocrinology clinic. The length of the procedure may vary depending on several factors, but generally lasts between 15-45 minutes.

4. How is the procedure performed?

The procedure is performed lying flat. After cleaning your neck, a topical anesthetic spray is used to reduce pain. In some cases, an additional anesthetic medication may be injected into the skin to further reduce discomfort during the procedure. Then, a very thin needle is inserted into the thyroid nodule in order to obtain tissue. The needle will remain in your skin for 5-10 seconds. This procedure is repeated 4-5 times in order to ensure adequate sampling. In general, the procedure is very well-tolerated.

Before your procedure

1. Do I need to hold any medications prior to my biopsy?

In general, you do not need to hold most medications prior to the biopsy procedure. If you take a “blood thinner”, ask your endocrinologist for guidance on whether the medication should be continued.

2. Do I need to fast for my biopsy?

You do not need to be fasting. You may eat and drink as you normally would prior to your procedure.

3. Do I need to arrange for someone to drive me home from my biopsy?

You do not need to arrange for someone else to drive you home from the procedure. The procedure does not require sedation. You are welcome to bring a friend or family member to provide support during the procedure.

After your procedure

1. What should I expect after the biopsy?

In general, there is very little, if any bleeding, during the procedure. A small Band-Aid may be placed over the biopsy site, but often this is unnecessary. You will be offered an ice pack for the trip home, but this is optional. You may experience some soreness or tenderness at the biopsy site, though this usually resolves over 1-2 days. You can use Tylenol (acetaminophen) as needed to address any pain. There are no formal restrictions following this procedure. You may proceed with your normal routine as tolerated.

2. Where does my biopsy sample go following the procedure?

The samples are transported to the main hospital so that specialized doctors called pathologists can review the samples under the microscope and provide a diagnosis.

3. How long does it typically take to get results?

In general, it takes about 1 week to receive initial results. Either the biopsy team or your endocrinologist will contact you with the results when they are available. In some cases, additional testing may be required to provide a diagnosis (see below). If this occurs, it may take up to 3-4 weeks to get a final result. If you do not hear from us within one week, please contact the clinic either through MyChart or by phone at 984-974-2950.

4. What are the possible results of thyroid biopsy?

Biopsy results are classified using a standardized system called the Bethesda System for Reporting Thyroid Cytology. This system contains the following categories:

1. **Benign:** The majority of biopsy results fall into this category. This category generally requires only monitoring.
2. **Malignant:** Nearly 99% of samples in this category represent cancer. The recommended management is generally surgical removal of the thyroid gland.
3. **Suspicious for malignancy:** 50-75% of samples in this category represent cancer. Generally, the cells demonstrate worrisome features but do not reach the threshold for definitive diagnosis.
4. **Atypia of Undetermined Significance (AUS):** Cells exhibit certain features that are considered abnormal. The majority of nodules in this category will be benign. The risk of malignancy is around 5-15%. This is considered an indeterminate result. Repeat biopsy or genetic testing (see below) is generally recommended.
5. **Suspicious for Follicular Neoplasm (SFN):** Similar to atypia of undetermined significance (AUS), this is an indeterminate category. The risk of malignancy is around 15-30%. Samples in this category are generally sent for genetic testing to further clarify risk. In some cases, diagnostic surgery may be considered.
6. **Non-diagnostic:** This means that the sample did not contain adequate thyroid cells to provide a diagnosis. This can occur for one of several reasons, but is more common when nodules have a large fluid (cystic) component.

5. What is molecular/genetic testing?

This is an additional test that has become available over the last several years. It helps us to better understand whether your thyroid nodule contains genetic alterations that might increase the risk of thyroid cancer. This testing is generally used when biopsy samples are indeterminate (see above). This is not used when samples are non-diagnostic or diagnostic of malignancy. This material for this testing is collected at the time of your biopsy and can be sent if needed.