

Thyroid Biopsy - Fine Needle Aspiration Information Sheet

General indications for the procedure:

Fine needle aspiration of the thyroid is a procedure used to obtain cells from one or several thyroid nodules to look at under the microscope. This allows for the diagnosis of cancer of the thyroid in 90% of patients. It will determine if any other treatments such as surgery may be needed.

Description of the procedure:

The aspiration (removal of cells thru a needle) is done in the outpatient office. No special preparation is needed. First, an ultrasound examination of the thyroid gland will be performed to precisely identify any thyroid nodule(s). If needed, the ultrasound can be used to guide the aspiration needle into the nodule(s). The skin of the neck will first be cleansed with alcohol. If the patient desires, the area can be numbed with lidocaine (like the dentist uses), although this is usually not necessary. The aspiration needle is very small, 1 inch long. Typically, it will be inserted 2-4 times into each nodule and a tiny drop of fluid and cells are withdrawn. Typically, the procedure takes 15 minutes and the patient may go home immediately thereafter.

Prior to the Procedure:

In order to minimize the risk of bleeding, patients on blood thinners such as coumadin (warfarin), aspirin, plavix, or lovenox (heparin) are asked to delay having the aspiration if they are on 2 of these agents together, or if they are taking 1 agent and they also are receiving dialysis for kidney failure.

Risks of the procedure:

Bleeding in the area of the thyroid nodule is a rare possible complication. Surgical intervention may be needed for a rare case of significant bleeding. Another rare possible complication of the aspiration is injury to one of the nerves next to the thyroid which activate the vocal cords. This may result in a hoarse voice that is usually temporary.

Procedure alternatives:

The nodule could be observed and its size followed with repeat measurements of its size by ultrasound. The aspiration could then be done at a later time. Alternatively, the nodule(s) could be removed with a surgical operation which requires the patient undergo general anesthesia.

Consequences of not undergoing the aspiration:

Not knowing if the thyroid nodule(s) is cancerous and requires an operation.

Person(s) performing the procedure:

The key portions of the procedure will be performed by a physician who is a member of the medical staff of Rush University Medical Center and/or an endocrinology fellow who is observed by a physician who is a member of the medical staff. Fellows are licensed physicians in approved post residency training programs. Parts of the procedure which they perform will be based on their level of competency.