# Fine Needle Aspiration

#### WHAT IS FNA?

Fine needle aspiration (FNA), also called fine needle biopsy, is a technique that allows a biopsy of various bumps and lumps. It allows your otolaryngologist to retrieve enough tissue for microscopic analysis and thus make an accurate diagnosis of a number of problems, such as inflammation or even cancer.

## **FNA Is Used for Diagnosis In:**

- Thyroid Gland
- Neck lymph nodes
- Neck cysts
- Salivary glands (i.e. parotid gland, submandibular gland)
- Inside the mouth
- Any lump that can be felt
- Lumps that are found on imaging tests (such as ultrasound) even if they can't be felt

#### WHY IS FNA IMPORTANT?

A mass or lump sometimes indicates a serious problem, such as a growth or cancer\*. While this is not always the case, the presence of a mass may require FNA for diagnosis. Your age, sex, and habits, such as smoking and drinking, are also important factors that help in the diagnosis of a mass. Symptoms of ear pain, increased difficulty swallowing, weight loss, or a history of familial thyroid disorder or of previous skin cancer (squamous cell carcinoma) may be important as well.

\* When found early, most cancers in the head and neck can be cured with relatively little difficulty. Cure rates for these cancers are greatly improved if people seek medical advice as soon as possible. So play it safe. If you have a lump in your head and neck area, see your otolaryngologist right away.

## WHAT ARE SOME AREAS THAT CAN BE BIOPSIED IN THIS FASHION?

FNA is generally used for diagnosis in areas such as neck lymph nodes or for cysts in the neck. FNA is the most commonly performed test to determine whether thyroid nodules are benign or suspicious for malignancy. The parotid gland (the mumps gland), submandibular gland, and other areas in the neck and inside the mouth or throat can be biopsied as well. Virtually any lump or bump that can be felt (palpated) or identified by ultrasound can be biopsied using the FNA technique. Tests for infection and certain chemical substances can also be done on the material that is obtained.

## **HOW IS FNA DONE?**

Your doctor will insert a small needle into the mass. A small amount of tissue can be drawn back into the needle using negative pressure on the syringe. Under a microscope, this tissue can be identified leading to a diagnosis. This procedure is generally accurate and frequently prevents the patient from having an open, surgical biopsy, which is more painful and costly. Local anesthesia (numbing medicine) may be used but is frequently not required. If the mass is small or difficult to feel, an ultrasound device can be used to help direct the needle into the mass. FNA is about as painful as drawing blood from the arm for laboratory testing (venipuncture). In fact, the needle used for FNA is smaller than that used for venipuncture. Although not painless, any discomfort associated with FNA is usually minimal.

### WHAT ARE THE COMPLICATIONS OF THE FNA PROCEDURE?

No medical procedure is without risks. Due to the small size of the needle, the chance of spreading a cancer or finding cancer in the needle path is very small. Other complications are rare; the most common is bleeding. If bleeding occurs at all, it is generally seen as a small bruise. Patients who take aspirin, Advil®, or blood thinners, such as Coumadin®, are more at risk to bleed. However, the risk is minimal. Infection is rarely seen. Sometimes the results of an FNA are indeterminate, leading to the need to repeat the FNA or use alternative tissue sampling techniques.