

DEPARTMENT OF DIAGNOSTIC RADIOLOGY AND NUCLEAR MEDICINE

Patient Information Sheet Ultrasound-guided Thyroid, Neck or Lymph node Biopsy

Indications for the Procedure: This procedure is indicated when a patient has a lump, a fluid collection or certain other abnormalities in the neck, such as the thyroid gland or a lymph node. A physician can determine if the abnormality is benign or malignant by taking a small sample of the abnormal tissue (a biopsy) or draining (aspirating) a small amount of fluid and testing it.

Description of the Procedure: The thyroid gland or other problem area is scanned with ultrasound to get a picture of the abnormality, and to determine where the best place to take a biopsy or fluid sample. An ink spot may be placed on the skin with a marker. The skin is cleaned with an iodine solution, and local anesthesia (numbing) is obtained with lidocaine, injected with a tiny needle. The needle may cause the patient to feel a pinch and burning sensation for a few seconds. A different needle is then placed into the abnormal area while the physician watches by ultrasound, and tissue cells or fluid is/are aspirated (sucked out) of the abnormal area. Only a small sample is taken. This may have to be repeated up to three times, if not enough tissue or fluid is obtained with one aspiration. No incisions are made. The puncture site is covered with a Band-Aid, and an ice pack is applied to help prevent swelling.

Risks of the Procedure: Serious complications from these procedures are very rare. Sometimes there may be slight bruising. If there is bleeding at the puncture site and a large amount of blood accumulates, it may cause a sensation of pressure or difficulty swallowing or, rarely, breathing difficulty. Even though the procedure is performed sterilely, it is possible for the area to become infected, in which case the patient might need antibiotics or a drainage procedure.

Alternatives to the Procedure: The only way to be certain of the nature of a suspicious lesion is to obtain a sample of it for testing. An ultrasound-guided biopsy is the safest way to sample the abnormal area. Surgery is the only alternative, which would be much more invasive. If not enough tissue is obtained at the time of biopsy, surgery may be needed nonetheless. Rarely, nuclear medicine studies, CT or MRI, may also help in the diagnosis, but these are less accurate.

Probable Consequences of Refusing the Procedure: If a suspicious lesion is allowed to grow, it may become too advanced to be adequately treated.

Persons performing the procedure: The key portions of the procedure will be performed by an attending physician who is a member of the medical staff of Rush University Medical Center, or a resident or fellow in Body Imaging who will be observed and supervised by a member of the medical staff. Residents are licensed physicians in an approved residency program. Fellows are licensed physicians who have completed a residency in radiology and are in an approved post-residency training program. The parts of the procedures residents or fellows will perform will be based on their level of training and competence.