

Patient information – Fine Needle Aspiration of the Thyroid

Department of Radiology

The Radiology Department

The Radiology Department carries out radiological examinations of patients using a range of equipment including CT, MRI, ultrasound scanners and a nuclear medicine gamma camera. There is a multidisciplinary team of radiologists (doctors who have been specially trained in radiology), radiographers, sonographers, nurses, assistant practitioners, radiology department assistants and clerical staff working in the radiology department.

What are thyroid nodules?

The thyroid gland is found at the bottom of the neck. It is responsible for producing thyroid hormone, which is important for metabolism. Thyroid nodules are very common; up to half of all people have one without any symptoms. Nodules are more frequent with age and are more common in women than men. Many are found incidentally during routine examination or ultrasound. The majority of thyroid nodules are benign (harmless growths); a small percentage contain malignant (cancerous) cells.

Assessment of a thyroid nodule

Patients with a thyroid nodule will usually undergo a medical history and physical examination by their GP or clinic doctor. Their doctor may then choose to order thyroid blood tests or imaging scans to assess the hormonal activity of a thyroid nodule, and to look at its anatomy. Following ultrasound, some patients will be advised to have a procedure known as fine needle aspiration ("FNA") of the thyroid gland.

Why do some patients require fine needle aspiration (FNA) of the thyroid gland?

This procedure obtains a small amount of tissue for analysis and is the best technique for detecting or ruling out the presence of cancer. It is usually performed for nodules that are over a certain size or that have suspicious features on ultrasound. In some cases FNA is performed because the patient has other factors that increase their risk of thyroid malignancy.

Fine needle aspiration can also be performed to treat thyroid cysts. A thyroid cyst is a fluid-filled sac within the thyroid gland. The fluid can be removed from the cyst with a needle and syringe; thereby reducing its size.

How is fine needle aspiration performed?

- The scan and procedure take approximately 20 minutes in total.
- No preparation is usually required. Occasionally a patient may be asked not to take blood-thinning medication on the day of the procedure. If a child is coming for the procedure then please ring the radiology nurses beforehand to discuss the application of topical local anaesthetic cream before the consultation.

- It is advised that you wear loose clothing around the neck. Please advise the team if you have any allergies on arrival.
- Once the ultrasound scan has been performed, and the nodule located, the surrounding skin will be cleaned with an antiseptic solution. Some doctors may numb the skin with a local anaesthetic. This can cause an initial stinging discomfort that lasts a few seconds.
- A small needle (similar to a blood test needle) is inserted into the thyroid. The needle is gently moved up and down to obtain a sample of tissue. The needle is then removed and the sample placed in a special bottle or onto a microscope slide. The procedure is usually repeated twice in the same area.
- Once the needle has been removed, pressure is applied over the area for a short while to minimise bleeding and you will be given a small plaster to wear for a few hours.

Precautions

If you are taking blood-thinning medication (anticoagulants), you should inform the Radiology Department before your appointment. Please ring the telephone number on your appointment letter or tell the Radiologist when you arrive.

What are the benefits?

Obtaining a tissue sample allows a diagnosis to be made and further treatment to be planned, if required. The procedure is minimally invasive and may save you from having open surgery.

Are there any side effects?

The main complications of fine needle aspiration of the thyroid include bleeding, infection and cyst formation, however these are exceedingly rare. If you experience discomfort from the puncture site you may wish to take a simple painkiller (e.g. paracetamol). Do not take medication which contains aspirin as this may cause a larger bruise. If you do notice excessive bruising or swelling in the area, have persistent pain, or develop a fever, you are advised to see your doctor. Very rarely the bruising can be significant and you may need to be admitted for observation.

Rarely a temporary change in your voice can occur.

When will I get the results?

The specimen collected during the procedure will be sent to the pathology laboratory for analysis. The pathology report will be sent to your Consultant or GP who requested the procedure which normally takes seven days. Sometimes insufficient tissue is obtained or the sample is indeterminate (not clearly benign or malignant), in this situation a repeat FNA may be necessary.

Contact details:

The Radiology Department (between 10am and 4pm)

Lister Hospital

Coreys Mill Lane

Stevenage

Herts

SG1 4AB

Telephone: 01438 735200 Ext 2107

You can request this information in a different format or another language.

Date of publication: August 2016
 Author: Dr Buckingham
 Review Date: August 2019
 © East and North Hertfordshire NHS Trust
www.enherts-tr.nhs.uk

