

Investigations of thyroid nodules

Information for patients

You have been given this leaflet following your appointment with the hospital doctor. You have been diagnosed with thyroid nodules and this leaflet will explain what investigations you have been referred for to check these nodules. If you have any further questions or concerns after reading this leaflet, please speak to your doctor (the contact details are listed at the end of this leaflet).

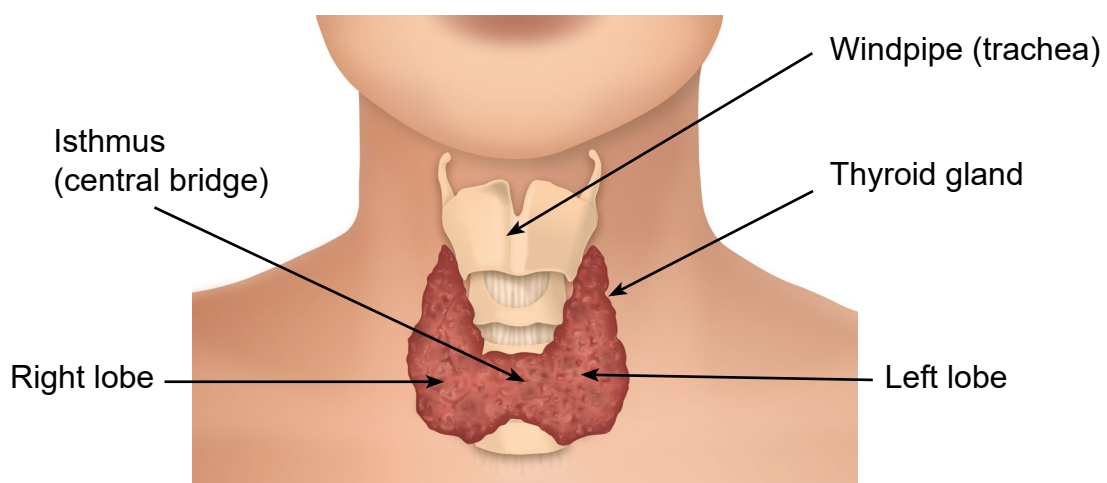
Please be aware you may be contacted at short notice to come to hospital for one of these tests. Any telephone calls from the hospital will come from withheld numbers.

It may not be possible for all investigations to be completed at the hospital nearest your home.

What is the thyroid gland and what does it do?

The thyroid gland is a butterfly shaped organ that sits in the neck, in front of the windpipe below the Adam's Apple. There are two halves (left and right lobes) joined by a central bridge (isthmus).

The thyroid gland secretes a hormone called thyroxine. Thyroxine controls the body's metabolism, which is vital for normal health. Metabolism is the process where your body converts what you eat and drink into energy.



Why have I been referred for these tests?

Thyroid nodules are very common but we are checking to see if your nodule could be cancer.

What tests do I need to have?

Your doctor will discuss with you the tests that they would like you to have. These tests may include the following.

- **Thyroid function tests** are a blood test that measures blood levels of thyroid-stimulating hormone (TSH) and thyroxine (a hormone produced by your thyroid gland). The results of these tests can show whether you have hyperthyroidism (too much thyroxine) or hypothyroidism (too little thyroxine). This test may already have been done by your GP.
- An **ultrasound** scan uses high-frequency sound waves to produce images of your thyroid gland. A thyroid ultrasound gives the best information about the shape, size, and structure of the nodules. Your doctor may use an ultrasound to distinguish cysts from solid nodules, or to see if you have multiple nodules. Doctors may also use it as a guide when performing a fine-needle aspiration biopsy.

This scan is carried out in the Ultrasound Department by a radiologist. There are no known risks to having this scan.

- **Fine needle aspiration biopsy (FNAC)**. Nodules are often biopsied to make sure no cancer is present. During an FNAC, your doctor inserts a small needle into the nodule and removes a sample of cells.

This procedure is often done at the same time as the ultrasound. It takes about 20 minutes and is very safe. The samples taken will be sent to the Pathology Department and your results will be sent to your doctor.

If it is not possible to complete the FNAC at the same time as your scan you may be asked to return another time.

If you take any blood thinning medications you may have been asked to stop taking these before your appointment. This should be discussed with you when you are contacted to book your FNAC appointment.

There is a small risk of some bruising or bleeding at the biopsy site.

Once your doctor has the results of the above tests, they may decide that you need to have further tests/investigations, such as a CT or MRI scan. If this is needed, your doctor will discuss the reasons for this with you.

What happens if I choose not to have these tests?

The blood test checks how your thyroid is working. It is important to check if you have an underactive or overactive thyroid. If your thyroid is left untreated it can cause you other health problems, including blood clots, heart disease, or strokes.

The ultrasound scan will give us information about the nodules, including their shape and size. A large non-cancerous nodule can still cause discomfort or problems with swallowing, because of the pressure it causes on your oesophagus (food pipe).

Will I have an anaesthetic before my FNAC?

You may be offered a local anaesthetic for the fine needle aspiration, but many patients do not need any anaesthetic. A local anaesthetic will numb the area, but you will be awake for the procedure. If you have any concerns about this, please speak to your doctor.

You can eat and drink as normal before this procedure.

How will I feel after the FNAC?

- After your FNAC, you may be asked to wait in the Ultrasound Department for up to 30 minutes. After this time you can go home.
- You should not feel any pain, but you may have some slight discomfort at the biopsy site.
- You can drive home from the hospital and return to work after your procedure.

Can I eat after my procedure?

Yes. You can eat and drink normally after your procedure

If I need to, is it safe for me to take painkillers?

If you do have any discomfort after your procedure, you can take some painkillers if needed.

How long will it take to get the results of my tests?

The radiologist may be able to tell you what they have seen on the ultrasound scan after your scan is completed, but you often need to wait for a formal report to be sent to the doctor who requested your scan.

If your doctor needs to compare the results with any of your previous scans, this can take longer.

If an FNAC is taken, the results of this will take about two weeks. The results will be discussed with you at your next appointment.

We will arrange a follow-up appointment with you to discuss your results. This may be a face-to-face appointment or a telephone consultation with one of the doctors or clinical nurse specialists (CNS).

What happens after my tests?

The results of your ultrasound will give us a detailed report about your thyroid. We will be able to see any nodules, and we will be able to see the size of the nodules and if there are any concerns.

The FNAC will give us information about the structure of the nodule, and if there is any concern that it may be thyroid cancer.

The results of these tests will help us to decide if we need to offer you any further investigations or treatment for your nodules.

What do my results mean?

Your test results are graded. What these grades mean is explained below.

- **Thy1: non-diagnostic.** There are not enough cells in the sample. Your doctor / CNS may recommend that your biopsy is repeated.
- **Thy1 c** is likely to show that you have a benign (not harmful) thyroid cyst. The doctor / CNS will discuss with you whether you need any further monitoring.
- **Thy2** is benign (not harmful) thyroid cells. Depending on the size of the nodule, we will discuss with you if you need any further investigations. Your doctor / CNS may recommend that we continue to monitor you or you may be discharged from our care.
- **Thy3.** Some changes can be seen in the cells since your last scan, this can be for many reasons but we cannot rule out cancer. We may discuss with you having surgery to remove part (hemithyroidectomy) or all of your thyroid (total thyroidectomy).
- **Thy4: suspicious of cancer.** It is likely that we will discuss surgery with you to remove part (hemithyroidectomy) or all of your thyroid (total thyroidectomy).
- **Thy5: almost definitely cancer.** It is likely that we will discuss surgery with you to remove part (hemithyroidectomy) or all of your thyroid (total thyroidectomy).

The doctor or CNS will discuss your results with you and the next steps in your treatment. If you have any questions or concerns about your results, please speak to your doctor or CNS.

Further investigations or treatment may not be needed. Nodules in the thyroid are very common and often do not need any treatment or investigations (other than thyroid function tests and an ultrasound). This will be discussed with you at your follow-up appointment.

What if my results show no concerns, but I still have a thyroid lump/swelling?

If all your investigations are reassuring and the thyroid lump or swelling is not causing any problems, then no treatment may be needed. The doctor / CNS will discuss with you if you need to be monitored. If you do not need monitoring, you will be discharged to the care of your GP who can refer you again if there is any further concern or the lump grows.

Sometimes the size of the lump may be monitored with follow-up scans, or in some cases your doctor may suggest surgery.

What happens now?

We understand that undergoing investigations can be a stressful time and we would encourage you to discuss any concerns you have with us, so that we can help you.

We will speak with you about all your treatment options. If you need time to consider your options then we can arrange a further appointment for you. Use this time to ask hospital staff any further questions or raise concerns. Remember you have the right to withdraw your consent for treatment at any time.

Further information

- **British Thyroid Foundation**
Web: www.btf-thyroid.org/

What if I have any questions or concerns about my condition or treatment?

If you have any questions or concerns about the tests discussed in this leaflet, please contact your consultant's secretary who will be able to arrange for someone to discuss your concerns with you.

- **Mr Theokli (secretary)**
Telephone: 01227 78 30 11
- **Mr Balfour (secretary)**
Telephone: 01227 78 30 85
- **Mr Dhar (secretary)**
Telephone: 01227 86 41 05
- **Mr Hone (secretary)**
Telephone: 01227 78 63 51
- **Mr Al-Lami (secretary)**
Telephone: 01227 78 63 51

This leaflet has been produced with and for patients

If you would like this information in **another language, audio, Braille, Easy Read, or large print** please ask a member of staff. You can ask someone to contact us on your behalf.

Any complaints, comments, concerns, or compliments please speak to your doctor or nurse, or contact the Patient Advice and Liaison Service (PALS) on 01227 78 31 45, or email ekh-tr.pals@nhs.net

Patients should not bring in large sums of money or valuables into hospital. Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property had been handed in to Trust staff for safe-keeping.

Further patient leaflets are available via the East Kent Hospitals web site www.ekhuft.nhs.uk/patientinformation