

Patient information

Solitary Nodular Thyroid Goitre

Diabetes and Endocrinology Speciality

What is solitary nodule thyroid goitre?

Solitary nodule thyroid goitre is a swelling in the neck caused by a lump in the thyroid gland. The thyroid gland sits in front of your windpipe and gullet, just above your collarbone. The gland produces a hormone called thyroxine, which is released into the blood stream and controls growth and metabolism (the process the body uses to build and maintain itself).

In normal health, the thyroid gland produces enough thyroxine to keep you well. Occasionally, the nodule produces excess thyroid hormone, or becomes so big that it affects your swallowing or breathing.

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Larynx	
Nodule	Cricoid cartilage
Trachea	Thyroid gland

What might I feel if I have this?

You may feel a pressure in your throat with difficulty in swallowing and maybe some difficulty in breathing. This is because the enlarged gland is pressing on both your windpipe (trachea) and gullet (oesophagus). High-necked clothes can feel uncomfortable and restrictive.

Too much thyroid hormone will cause a condition known as hyperthyroidism.

What does it feel like to have hyperthyroidism?

You may feel some or all of the following:

- Irritable and anxious with a general feeling of nervousness.
- Unable to tolerate heat.
- Sweating more than usual.
- Weight loss even with a good appetite.
- Palpitations, a sensation of skipped or irregular heartbeat.
- Sleep disturbance.
- Mood swings.

How is it diagnosed?

Blood tests will be taken to check the level of your thyroid hormones; these are usually taken before your first clinic visit by your family doctor (GP).

You will be referred to a Consultant Endocrinologist. At your clinic appointment, your neck will be examined to check for an enlarged thyroid gland and you will be assessed further. Scans of your neck are carried out in the nuclear medicine department to check if you have a nodule and also to assess how active the nodule is.

What treatment is available?

There are two forms of treatment available, radio iodine or surgery.

The decision about which treatment option to take will be made after the Consultant Endocrinologist has assessed you and discussed the options with you.

Before either treatment, your thyroid hormone level would be stabilised by anti-thyroid medication, in the form of tablets.

What do the tablets do?

There are two tablets that can be given; Carbimazole or Propylthiouracil, both stop your thyroid gland from producing thyroxine. Either tablet can be given to reduce the level of thyroid hormone in your blood, and so reduce the symptoms described above.

You may also be given a tablet called Propanolol to help with palpitations, sweating and anxiety.

What are the side effects?

Both Carbimazole and Propylthiouracil stop your thyroid gland from producing any thyroxine hormone so you could develop hypothyroidism, an under active thyroid gland.

Both tablets can cause rashes and itching but this is usually only temporary. Nausea (feeling sick) with mild stomach upsets and headaches have also been reported. Rarely, you can get a serious reduction in the white blood cells in your body. These cells help to fight infection in your body.

If you develop signs or symptoms of infection, especially a sore throat, or unexplained bruising or bleeding, you should seek medical advice straight away so that your full blood count can be measured to check your white blood cell count. Do not stop your medication unless told to do so by the Endocrine team.

How are the treatments given?

Radio iodine is given in the Nuclear Medicine Department and is usually a colourless, tasteless drink or a capsule which you will need to swallow. The dose to be given is assessed by a thyroid scan before treatment, which allows the doctors to check how much radio iodine your thyroid gland will take.

Surgery is performed in the main operating department at the hospital and you would be admitted to a general surgical ward for this. If you are having surgery you will be given further written information.

What are the benefits of radio iodine?

This treatment is given on an outpatient basis, with you attending the Nuclear Medicine department to receive the treatment.

Multiple doses can be given as needed to treat the over active nodule and there are few side effects. You can continue with many aspects of your normal routine while being treated.

What are the risks of radio iodine treatment?

Radio iodine has been used in the treatment of thyroid disease for many years and is a generally safe method of treatment.

It is not given to women who are pregnant, or intend to become pregnant within six months, as the risks to the unborn child are unclear. Men should avoid fathering a child during treatment and for twelve months afterwards.

Following radio-iodine you will need to avoid close contact with family and friends, especially children and pregnant women. You will be advised about this by the nuclear medicine department following your treatment.

There is a separate leaflet giving details of Radio-iodine treatment (available from nuclear medicine).

Hypothyroidism may occur, leading you to feel sluggish with constipation, tiredness, dry skin and hair. This is easily treated by thyroxine tablets, which you would take every day. If you do become hypothyroid following radio-iodine treatment you would be on Thyroxine for life.

What are the benefits of surgery?

Removing part or all of the thyroid gland will remove any of the problems you have with swallowing or breathing. If you have had hyperthyroidism, removing the over active nodule will return the thyroid gland to normal function. There is a short stay in hospital and you can return to work usually after two to three weeks.

What are the risks of surgery?

Complications of thyroid surgery are rare. Clotting in the veins or chest infections are uncommon.

Due to the position of the thyroid gland in the neck, the nerves on either side of the voice box can be damaged, resulting in hoarseness, which can be temporary if the damage was minimal, but may also be permanent. A very rare complication is damage to both nerves.

You may have difficulty in breathing, as your voice box (larynx) would be paralysed. If this happens, you would need a tracheostomy (a hole in your windpipe) to help you breathe.

Every care is taken by the surgeon to protect these nerves during the surgery.

More often people will find they cannot sing or shout as well as before surgery. This is because of damage to another, smaller nerve.

Hypothyroidism can happen following surgery. If this happened you might feel tired and sluggish, with constipation and dry skin and hair. This can be easily treated with thyroxine tablets. If you do become hypothyroid following surgery you would be on Thyroxine for life.

Is there anything else I should know?

You will have a thin scar from the surgery at collarbone level. This usually settles to become a thin line in your neck.

The parathyroid glands are located very closely to the thyroid gland. Removing some or all of the thyroid gland may disrupt the function of these glands. The parathyroid glands control the level of calcium in your blood. If they are damaged by the thyroid surgery you may have a low blood calcium level, which would cause tingling around your mouth and cramps in your hands and feet. Calcium and vitamin D tablets correct the low calcium levels. If the damage was permanent then you would need to continue these tablets for the rest of your life.

What will happen if I decide not to have treatment?

If you decide not to have treatment you would get increased problems with symptoms such as sweating and anxiety. Palpitations would get worse and your heart will develop an irregular beat. You may develop a rare but serious condition called a thyroid storm.

This can be brought about by an injury, infection or childbirth. The symptoms of a thyroid storm include a very fast heart rate, high temperature, feeling agitated and eventually loss of consciousness. A thyroid storm requires emergency medical treatment in hospital.

Thinning of your bones can also happen if hyperthyroidism is left untreated for many years. If your bones become thin they can break more easily.

If you are pregnant, you are at increased risk of developing some pregnancy complications such as premature labour, miscarriage and foetal development abnormalities.

The nodule, if left untreated may continue to enlarge over many years and cause symptoms of local compression including difficulty in swallowing, breathing and a hoarse voice.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further Information

Please feel free to contact the Endocrine Specialist Nurses with any questions you may have. There is an answer machine where you can leave your name and contact details. We will return all calls.

The Endocrinology Specialist Nurses Tel: 0151 706 2417 Text phone number: 18001 0151 706 2417

Related Trust Patient information leaflets:

- Anti-thyroid medications (PIF 1577)
- Radioactive iodine treatment for hypothyroidism your questions answered (PIF 1506)

There is a very good patient support group which offers excellent advice through letters and telephone contact. They also hold local area group meetings:

British Thyroid Foundation Suite 12, One Sceptre House Hornbeam Square North Hornbeam Park Harrogate HG2 8BP Tel: 01423 810093

www.btf-thyroid.org

Email: info@btf-thyroid.org

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All Trust approved information is available on request in alternative formats, including other languages, easy read, large print, audio, Braille, moon and electronically.

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