

Patient information

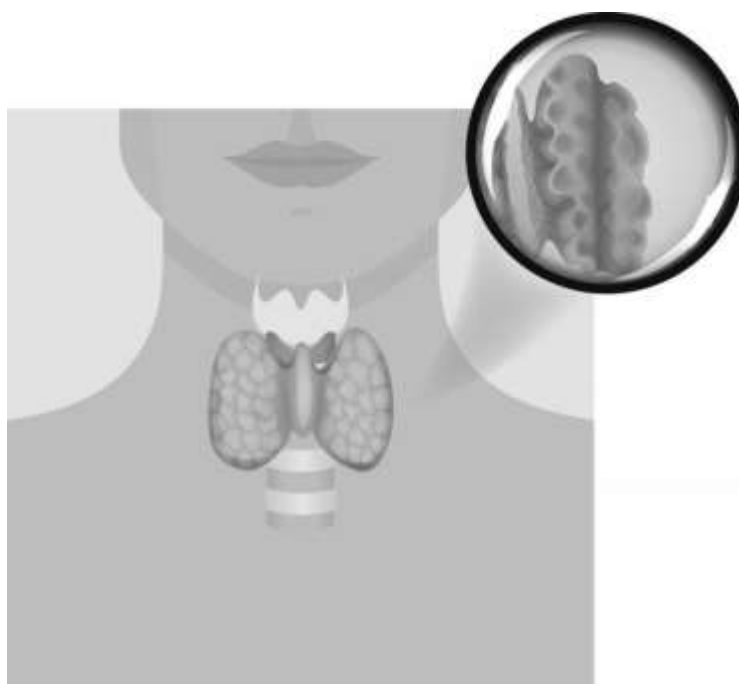
Multi-nodular Goitre

Diabetes and Endocrinology Speciality

What is multi-nodular thyroid goitre?

Multi-nodular thyroid goitre is a swelling in your neck, which is caused by an enlarged thyroid gland. There are many 'lumps' or nodules within the gland, which cause the enlargement.

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 gland produces enough thyroxine to keep you well.



Multi-nodular Goitre

What effect(s) will this have on me?

There will be local pressure effects which may lead to you having an irritating cough, you may feel it is difficult to swallow due to the enlarged gland pressing on your gullet (oesophagus) and high necked clothes may be uncomfortable. You may also experience difficulty in breathing as the enlarged gland also presses on your windpipe (trachea). The nodules may produce higher levels of thyroxine leading to hyperthyroidism or an over active thyroid gland.

What does it feel like to have hyperthyroidism?

You may feel some or all of the following:

- Weight loss even with a good appetite.
- Increased bowel movements, maybe even diarrhoea.
- Sweating and being unable to tolerate heat.
- A general feeling of nervousness or anxiety.
- Palpitations, a sense of skipped or irregular heartbeat.
- Sleep disturbance.
- Irritability.

How is it diagnosed?

Your family doctor (GP) will take some blood tests to check the level of your thyroid hormones.

He may also examine your neck to check if he can feel an enlarged thyroid gland. You will be referred to a Consultant Endocrinologist for further assessment. The combination of blood tests and examination by the doctors along with your account of your symptoms will give the diagnosis.

What treatment will I be given?

There are two main treatment choices for this condition. The first treatment choice is tablets, called anti thyroid drugs. These are given to stop your thyroid gland producing thyroxine. Blood tests will be taken on a regular basis to check your thyroid level and the dose of the tablets adjusted in line with this.

If this treatment was not successful you would be offered alternative treatments. These are discussed below.

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 in high doses to begin with. Regular blood tests will be needed to assess the level of thyroxine in your blood. When this level begins to fall the dose of the tablets will be reduced. This allows your thyroid gland to still produce some thyroxine but not too much. Regular blood tests would be needed to be sure your level of thyroxine was normal.

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 will 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 stop your tablets and seek medical advice straight away.

How long will I have to take the tablets for?

The usual treatment course is 18 months to two years. The exact time is decided on by assessing your response to the treatment.

You will need to take the tablets every day. During the treatment course you will visit the nurse specialist clinic at regular intervals to have your blood checked. This will also give you opportunity to discuss any problems or concerns you may have.

What will happen if I don't take the tablets?

You would get increased problems with symptoms such as sweating and anxiety. Palpitations would get worse and your heart will develop an irregular beat. If left without treatment, hyperthyroidism can cause very high body temperatures and unconsciousness. 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.

What happens after the treatment course is completed?

Your specialist will review you in the clinic and advise you when to stop taking your anti thyroid tablets. This is usually after 18 months or two years of treatment.

If your thyroid gland becomes under active as a result of the treatment this can be easily treated with thyroxine tablets taken once daily. You should see your doctor or specialist nurse at least once every year. A blood sample will be taken to check the level of your thyroxine.

What other treatments are there?

Radio-iodine

This reduces the over activity of the thyroid gland by destroying some of the cells and preventing repair of others. You can be given the treatment as an outpatient and it takes the form of a capsule or tasteless drink.

This is usually given after a course of tablets to reduce the activity of the thyroid gland. It is performed in the Nuclear Medicine Department and on your first visit there your suitability for this treatment will be assessed. This will be by a thyroid scan.

The staff in the department will discuss the treatment in detail with you. You would need to stop taking your carbimazole or propylthiouracil seven to ten days before your radio-iodine treatment.

How long does the treatment take to work?

The full effects of this treatment can take between a few weeks and several months to work. During this time you may need to take other drugs such as carbimazole or propranolol to help control your symptoms. Your thyroid hormone level will be checked regularly following the treatment to monitor the effectiveness of the treatment. If the treatment has not worked within four to six months, sometimes a second dose of radio-iodine may be needed to reduce the thyroid activity fully.

What else do I need to know about this treatment?

The main result of this treatment is hypothyroidism, which is an under active thyroid gland. The doctors looking after you will check this for.

If you develop hypothyroidism you may feel tired and sluggish with constipation, weight gain and dry skin and hair. This condition is easily treated with thyroxine tablets taken each day. If you do become hypothyroid following radio-iodine treatment you would be on thyroxine for life.

Following radio-iodine you will need to avoid prolonged contact with family and friends and avoid children and pregnant women completely. You will be given detailed instructions and time frames at your discussion with nuclear medicine who administer the treatment.

If you were pregnant or planning a pregnancy within six months of the treatment alternative treatments would be considered. Men should avoid fathering a child for 12 months after radio-iodine treatment.

Surgery

This may be an alternative treatment if you are having particular problems with swallowing and breathing.

It can also be performed if the other two treatments have been unsuccessful in bringing the level of thyroid hormone back to normal.

The surgery is performed at the Royal Liverpool Hospital and usually involves just an overnight stay. A separate information leaflet giving full details of the surgery is available on request.

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 Patient information leaflets:

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

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

They are the:

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

www.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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