What are thyroid nodules and swellings?
A swelling in the neck due to an enlarged thyroid gland is called a goitre. Nodules are lumps in the thyroid gland. Most are harmless but you should arrange an appointment with your doctor as soon as you find a lump or swelling.

What are the main causes of enlargement of the thyroid gland?
The main cause is unknown, but thyroid nodules and thyroid enlargement are more common in women than men and increase in frequency with age. Women often develop thyroid enlargement during pregnancy.

If you have a nodule or swelling in your neck you should see your doctor with a minimum of delay. Your doctor will assess the swelling and refer you to a specialist clinic if necessary. Most nodules and swellings are harmless, but it is always best to have them checked promptly in case they are among the few that are cancerous.

What are the main types of thyroid nodules and swellings?
The most common types are as follows:

- **Single thyroid nodule (solitary nodule)**
  Solitary nodules are most commonly benign and very often can be left untreated. If a cancer cannot be excluded by investigations, surgery is usually recommended. If the nodule is ‘hot’ (i.e. it produces too much thyroid hormone) then it can be treated either by drug therapy, radioactive iodine treatment or sometimes surgery.

- **Multiple thyroid nodules (multinodular goitre)**
  A multinodular goitre is common and usually does not need an operation unless you have problems with swallowing and/or breathing or if you feel the goitre is unsightly. If the thyroid gland is growing rapidly or one or more of nodules raises concern following investigation, then surgery may also be recommended.

- **Diffuse goitre**
  This is often caused by autoimmune thyroid conditions such as Hashimoto’s thyroiditis and Graves’ disease and can be associated with an over- or an under-active thyroid.

- **Retrosternal goitre**
  Sometimes a multinodular thyroid grows down behind the breastbone. It can constrict or squash the windpipe (trachea) and the large veins in the neck and/or the gullet (oesophagus) because it is in a fixed bony space. In this situation, surgery may be considered. Most retrosternal goitres grow slowly over many years.

The following are types of thyroid nodules:

- **Colloid and Hyperplastic nodules**
  These are benign lumps which can be solitary or found in a multinodular goitre. They can usually be observed without the need for surgery.

- **Thyroid adenoma**
This is also benign lump, but is harder to distinguish from a cancer by scans and biopsy. It is, therefore, usually removed surgically so that its benign nature can be confirmed by close examination under the microscope.

- **Thyroid cyst**
  This is a swelling that contains fluid, which is treated by removing the fluid through a needle (fine needle aspiration). If this fails, then surgery may be advised.

- **Thyroid cancer**
  Thyroid cancer is rare and has a high cure rate. The treatment for thyroid cancer is surgery to remove most or all of the thyroid gland, followed by radioactive iodine ablation in some cases. You may need to take levothyroxine (synthetic thyroid hormone) in a slightly higher than normal dose to replace your body’s thyroid hormone production and to stop the cancer from recurring.

**What are the usual tests performed to investigate thyroid lumps and swellings?**
There are various tests that can be carried out to find the cause of your thyroid problem. These include:

- **Blood tests** – this is usually the first test performed and is done to ensure that your thyroid is not over- or under-active.

- **Ultrasound scan** - this is painless and uses sound waves from a probe to examine the structure of the thyroid gland. It can establish the number and size of nodules in the thyroid and can give important information on the likelihood that a nodule is benign or a cancer.

- **Fine needle aspiration cytology (FNAC)** – this is where some cells are removed from a thyroid nodule using a thin needle. The cells are then examined under a microscope. There may be some discomfort, but the procedure is usually quite quick.

- **X-rays** - a CT scan (a special form of X-ray) may be performed to check the position of a retrosternal goitre in relation to the windpipe (trachea) and gullet (oesophagus).

- **Nuclear medicine scan** - this is a type of X-Ray that checks the size, shape, and position of the thyroid and detects areas that are over-active (‘hot’) or under-active (‘cold’).

**What is the treatment?**
If all the investigations are reassuring and the thyroid lump or swelling is not causing any problems, then no treatment may be required. Sometimes, the size of the lump may be monitored by follow-up scans. In some situations, the doctor may recommend one or several of the following treatments:

- **Surgery**
- **Radioactive iodine**
- **Antithyroid drugs Hyperthyroidism**
- **Levothyroxine tablets**

**Some important points….**

- Any nodule or swelling you find should be investigated straightaway
- Most nodules and swellings are not cancerous
- Most thyroid cancers are curable
- Treatment for any of the above conditions may involve one or several of the following: surgery, radioactive iodine, antithyroid drug therapy or levothyroxine tablets
- Check with your doctor whether your prescription is exempt from charges
Thyroid problems often run in families and if family members are unwell they should be encouraged to discuss with their own GP whether thyroid testing is warranted.

If you have questions or concerns about your thyroid disorder, you should talk to your doctor or specialist as they will be best placed to advise you. You may also contact the British Thyroid Foundation for further information and support, or if you have any comments about the information contained in this leaflet.

The British Thyroid Foundation
www.btf-thyroid.org

The British Thyroid Foundation is a registered charity: England and Wales No 1006391, Scotland SC046037

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The British Thyroid Association - medical professionals encouraging the highest standards in patient care and research
www.british-thyroid-association.org

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