



Thyroglossal duct cyst

QUICK FACTS

- A thyroglossal duct (TGD) cyst is a benign (non-cancerous) lump in the front of the neck.
- Some people are born with a TGD cyst. This is uncommon.
- It is most frequently found in children but can also be noticed for the first time later in life.
- Some TGD cysts can grow bigger, become infected, or leak through the skin.
- The treatment of a TGD cyst is removal by an operation.

ABOUT THE CONDITION

What is a thyroglossal duct cyst?

A thyroglossal duct (TGD) cyst is a fluid-filled sac or lump in the front of the neck. It is uncommon.



IMAGE
COMING SOON

Figure 1. The thyroglossal cyst forms along the path taken by the thyroid gland

What causes a thyroglossal duct cyst?

The thyroid gland travels from the back of the tongue down into the neck while a baby is in the womb. A sac of fluid or cyst may form along the path the thyroid gland follows. This is called a thyroglossal duct cyst (TGD cyst).

It is not known why some people develop a TGD cyst and others don't.

What symptoms may I have?

Some people don't even know they have a TGD cyst.

A TGD cyst can sometimes be found during childhood (between the ages of 2-10) as a small, round, soft lump at the front of the neck. You may just have a lump and no other symptoms at all.

A thyroglossal duct cyst may also become infected, usually when you have an illness such as a cold. It may become red, swollen, and painful. It may even leak fluid or pus. An infected TGD cyst can normally be treated with antibiotics.

Will I need any tests?

A TGD cyst is usually diagnosed after a neck examination. The lump typically moves up and down with swallowing and moves up when sticking out the tongue.

An ultrasound scan can usually tell if a lump in the front of the neck is a TGD cyst. If the cyst looks unusual on the scan, a needle biopsy called a fine needle aspirate, or FNA, may be taken.

The ultrasound scan also confirms the presence of a normal thyroid gland. A blood test will tell you if the thyroid gland is working normally.

Sometimes, more in-depth scans, like a CT scan or an MRI scan, may be needed.

Will I need any treatment?

If the lump is small and does not give you any symptoms, then you do not need any treatment.

An infected thyroglossal duct cyst can be treated with antibiotics. However, this will not get rid of the cyst itself. Sometimes removing infected fluid or pus from the infected cyst is necessary.

The treatment for a thyroglossal duct cyst is an operation. You may need this if you are having a lot of problems with a TGD cyst. This includes cysts which keep getting infected and cysts that leak through the skin of the neck.

ABOUT THE PROCEDURE

What is the benefit of having surgery?

Surgery stops you from having recurrent infections of the TGD cyst and stops the cyst from leaking on the skin of the neck.

The surgery to remove the cyst is easier if it is done before the cyst has become infected. The recovery period after the surgery is also easier. A TGD cyst can still be removed after an infection, but the infection must have cleared up completely before surgery.

It is rare (less than 1 in 100 cases) for a TGD cyst to contain a type of thyroid cancer. All TGD cysts removed are analysed under a microscope in a lab.

What does the operation involve?

The most common operation is called a sistrunk procedure. This involves removing the TGD cyst through a cut in the front of the neck. The cyst is removed along with the path of tissue in which it formed. This also includes a piece of a small bone in the middle of the neck (called the hyoid bone, see Figure 1) and a small amount of the underside of the tongue.



Figure 2: extent of excision.

The removal of more than just the cyst itself reduces the risk of the cyst coming back.

Are there any alternative treatments?

The treatment for a thyroglossal duct cyst is surgical removal. Alternative ways of removing the cyst include:

- Simple cyst excision (only the cyst is removed) – This is not recommended as the risk of the cyst coming back is high (50 in 100 cases).
 - Wide local excision - This is like a Sistrunk operation, but more tissue is removed from the middle part of the neck. This type of surgery carries the lowest risk of the cyst coming back (less than 2 in 100 cases).
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What to expect after the operation?

The cut on the skin should heal within 7 days. It is important to keep it dry for at least 2 days. The stitches used to close the cut will dissolve over time.

Numbness: There can be some numbness of the skin around the cut which should improve over time.

Scar: There will be a scar following the surgery. This is a natural part of skin healing. Your surgeon will aim to minimise scarring with how they close the cut, however everyone's body heals differently. You will usually be able to tell how noticeable your scar will be after 6-12 months.

ABOUT THE RISKS

Are there any complications to this operation?

Most patients who have this operation recover well.

The complications and risks of any surgery are grouped into the following categories.



Your surgeon will be able to tell you their own complication rate.

Bleeding: Less than 1 in 100 people will have a bleed. Your surgeon may put a drainage tube to reduce the risk of bleeding. It is uncommon for patients to return to the operating theatre to stop the bleeding.

Wound infection: If you notice that the wound becomes very red or is leaking fluid, this could be a sign of an infection. Please contact your surgical team for advice.

Between 3 and 5 out of 100 people will develop a wound infection. This will be treated with a course of antibiotics. It is uncommon to be taken back to theatre to drain the infection and wash the wound.

If there is a neck swelling that is quickly becoming bigger, causing any difficulty with breathing, or swallowing, or concerning you; please contact your surgical team for advice urgently. Out of hours, please attend your nearest emergency department.

Nerve injury: The nerve that supplies the tongue and voice box are not usually in the operative field therefore injury to these nerves is very rare.

Recurrence: With a simple cyst removal, the risk of the cyst coming back is 50 in 100 cases.

The cyst will come back in 10 in 100 patients who have a Sistrunk procedure.

In a wide local excision, more tissue is removed from the middle part of the neck. The risk of recurrence is less than 2 in 100 cases.

Complications of general anaesthetic: The operation is usually performed under a general anaesthetic, where you are asleep. Complications can include blood clots in the legs (deep vein thrombosis) or lungs (pulmonary embolism), heart attack, chest infection, stroke, and death. The pre-assessment team and anaesthetist will tell you what happens during a general anaesthetic and any risks that are relevant to you. [The linked document](#) explains the common events and risks of a general anaesthetic.

AFTER THE SURGERY

What happens after the operation?

After the operation, you will be transferred to the recovery area. When you are fully awake, you will be taken to the ward.

Will I have a drain in my neck?

A wound drain may be inserted. The nursing staff will monitor this. You will be reviewed on the ward round and a decision will be made about when the drain can be removed.

Some units do not use drains and your surgeon will let you know what to expect in your case.

How long will I be in hospital?

Most patients spend one or two days in hospital. If you have a drain in your neck, you need to stay in the hospital until it is removed. If you have bleeding or wound infection, you may need to stay in hospital for more than 2 days.

How long will I be off work?

We normally recommend taking two weeks off to recover fully. You should be feeling well in yourself the day after the operation.

The reason we recommend taking two weeks off is so that you are not in contact with people at work who may have an infection. It is especially important if you work in a dusty environment.

Will I have a follow-up appointment?

Your surgical team will advise you on this.



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FEEDBACK SURVEY



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