

# Thyroglossal Cysts

## What is a thyroglossal cyst?

In our necks we have a large gland called the thyroid gland which makes important thyroid hormones. During our development in the womb the thyroid gland makes a journey from the back of the tongue, where it forms, down into the neck. As it descends, it leaves behind it leaves a small tube called the thyroglossal tract which passes from the back of the tongue to the resting place of the thyroid gland in the neck.

Normally the thyroglossal tract disappears by the time we are born but occasionally parts of it persist and have a tendency to form cysts in and around the midline of the neck. These cysts are called thyroglossal cysts (or thyroglossal duct cysts).

## How do they present?

Often there is nothing visible at birth, although the cyst is there but very small. During the first few years of life a cyst appears under the chin in the middle of the neck or just to one side. This may follow a cold or infection.

## What problems can they cause?

Unfortunately they have a tendency to get infected and may form abscess which need to be drained surgically. It is rare for them to change and become malignant but over one hundred cases of cancer developing in thyroglossal cysts have been reported in the medical literature.

## How should they be treated?

In view of the tendency to get infected and the very small risk of malignant change it is usually recommended that they are removed which means a operation.

## Is it a simple operation and can the cyst come back?

It is very important that as well as removing the cyst all remnants of the thyroglossal tract are removed. If this is not done then the cyst may well come back. This problem was recognized in 1926 by a surgeon called Sistrunk who recommended that as well as the cyst a central portion of the underlying hyoid bone and the adjacent muscle leading up into the tongue needs to be removed to prevent the cyst recurring. Sistrunk's operation forms the basis of the modern operation. Recurrence is a major problem in all series in the literature with recurrence rates of 20-30% being not uncommon. For this reason it is very

important that surgery is performed by a specialist who understands these problems. Wider operations can keep the recurrence rate down to 1% or less.

### **What are the potential complications?**

Fortunately complications are very uncommon. If they arise they are usually simple e.g. bruising, bleeding or infection of the wound which can be easily treated. The most frustrating complication is perhaps when the cyst comes back and a further operation is needed. Careful initial surgery can keep this problem to a minimum however there is always a small risk of recurrence. The surgeon will be operating around the child's airway and swallowing passages. As in any operation there is a risk of damaging adjacent structures but this remains extremely rare indeed.