

Excision of Thyroglossal Duct Cyst (Sistrunk Procedure)

Thyroglossal duct cysts result from an error in the formation of the thyroid gland. While you are developing in the womb, the thyroid gland develops from tissue located in the back of the tongue. This tissue migrates down into the neck and reaches its final destination in front of the windpipe. During its descent, the thyroid gland sometimes remains connected to the back of the tongue by the thyroglossal duct. This connection normally disappears as the thyroid reaches its final position in the neck. Persistence of this embryonic duct results in the formation of a cyst that will fill up with fluid. Large cysts could cause difficulty in swallowing and airway obstruction. Occasionally, they also get infected and form an abscess that requires a drainage procedure. Thyroglossal duct cysts are most commonly detected in children and adolescents.

There is no good medical treatment. Surgical treatment is directed at removal of the cyst and the connected duct. The duct is followed upward to a region of the back of the tongue. A small piece of the bone, called the hyoid, is also removed with the cyst and the attached duct. This operation is called the Sistrunk procedure. By removing the hyoid bone, the recurrence rate of a cyst is much lower.

Complications are infrequent. Like any operation, there is a small chance of post operative infection or bleeding. A thyroglossal duct cyst has a small chance of regrowing if small portions of the tissue remain after surgery. Infection of the cyst prior to surgery can make the removal more difficult and increase the chance for regrowth. Rarely, thyroid cancer can occur inside a thyroglossal duct cyst and may require further surgical treatment.

After surgery, you will have sutures that close the skin and possibly a drain to allow fluid that normally accumulates to leak out. The drain will typically be removed the day after surgery in the office, which is easy and only mildly uncomfortable.

It is important to not exercise or do any rigorous activity for 10 days after surgery to minimize the risk of a swelling, bleeding, and unsightly scarring. A follow-up visit one week after surgery will be needed to remove the sutures. You can take a shower two days after surgery, but just allow the water to run over the tape. Don't scrub the area or peel off the tape. In the weeks after surgery, keep the incision moist with Vaseline or Dr. Rogers Restore ointment. Also, minimize sun exposure to the scar for several months to optimize healing.