

## *Congenital Cysts of the Neck in Children*

There are a variety of soft, nontender lumps that may develop in the neck prior to birth, and they arise from a range of causes. While most are not dangerous, some can become infected and should be surgically removed. Some can give rise to cancer in adults. Others may be removed simply for cosmetic reasons.

**Thyroglossal Duct Cysts** – Developing fetuses have a channel called the thyroglossal duct, which is a temporary channel between the developing thyroid gland and the tongue. Once the thyroid gland descends from the base of the tongue, this duct normally closes and disappears (usually by the time of birth). Sometimes a piece of the duct remains, however, and will develop into a cyst, usually during childhood or adolescence. In such cases, the remaining portion of the thyroglossal duct and cyst (and its underlying attachment to the hyoid bone, at the base of the tongue) must be removed completely. If they are not removed completely, there is a high recurrence rate of such cysts. In adulthood, these cysts can develop into cancer. Diagnostic tests such as ultrasound of the neck or CT scan can determine if the thyroid gland is in a normal position.

**Branchial Cleft Cysts** – Branchial cleft cysts or sinuses are congenital lesions that arise from remnants of a slight cleft or defect during gestation. They are usually found on the side of the necks of children aged 2 – 10. They may change in size and shape, and are often noticed after an upper respiratory tract infection. Branchial cleft cysts or sinuses may have external openings or pores from which a mucus-like material drains out. They should be removed for several reasons, including 1) ascertaining a correct diagnosis, 2) improving appearance, and 3) preventing infection. Branchial cleft cysts may also be called cervical lymphoepithelial cysts.

**Dermoids** – Dermoid cysts are slow-growing, benign tumors which may occur in the midline of the neck. In the neck, dermoid cysts are usually firm lumps attached to the overlying skin.

**Enlarged lymph nodes** – Enlarged lymph nodes are the most commonly found lumps or swellings in children. These may be caused by bacterial or viral infections, malignancies or other rare causes. If the lump is caused by inflamed lymph nodes, antibiotics may be prescribed. A skin test for tuberculosis may also be performed, as TB and similar infections may be the cause. Cancer of the lymph nodes and other malignant tumors are rare in children.

### **Other neck lumps and bumps**

**Enlargement of the submandibular salivary glands** – lumps in this location, under the jaw, may develop from infection or malignancy.

**Lumps in the muscles of the neck** – usually occurring on the side of the neck and noted just after birth, such lumps arise from injury from a difficult delivery and may manifest as torticollis, which is an unnatural twisting of the neck due to contraction of the muscles.

**Sebaceous Cysts** – lumps in or just under the skin. A sebaceous cyst is a catch-all term for a benign, harmless growth that occurs under the skin and tends to be smooth to the touch. Ranging in size, sebaceous cysts are usually found on the scalp, face, ears, and genitals. They are formed when the release of sebum, a medium-thick fluid produced by sebaceous glands in the skin, is blocked. Unless they become infected and painful or large, sebaceous cysts do not require medical attention or treatment, and they usually go away on their own. If they become infected, the physician may drain the fluid and cells that make up the cyst wall. Or, if the cyst causes irritation or cosmetic problems, it may be removed through a simple excision procedure.

**Thyroid gland swelling or lumps** – due to thyroid disease or cancer. Nodules or goiters should be treated medically or surgically.