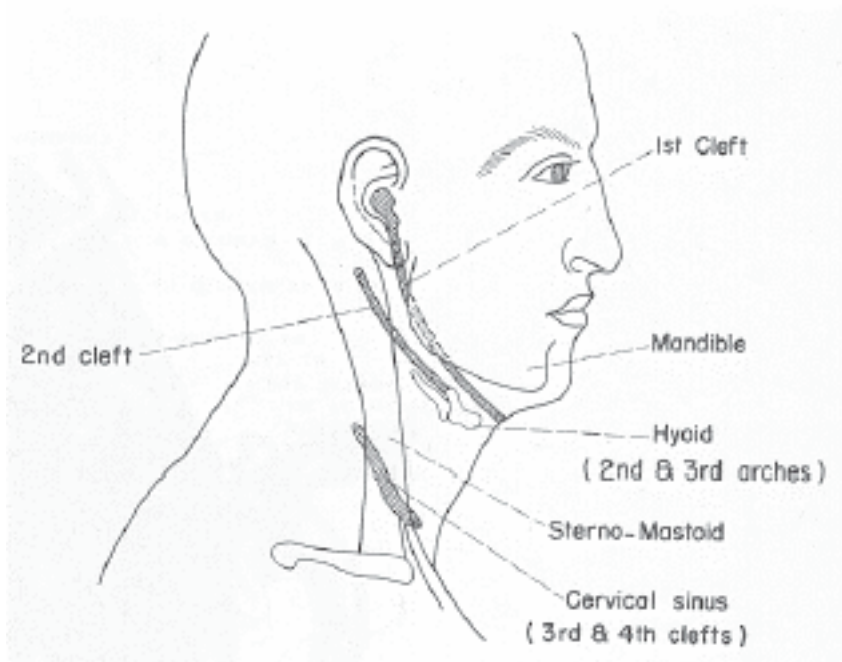


## Patient Care > Branchial Cleft Cyst



### Definition

**A branchial cleft cyst is a congenital lesion found in the neck.** It may appear as a skin dimple, lump, or small abscess. The dimple may drain a few drops of yellow mucous material. Below the skin dimple is a tract or pathway that leads to a cyst.

**There are three different kinds of branchial cleft cysts, categorized according to their location in the neck.** The first branchial cleft cyst is found in the neck just below the jaw. The tract of the cyst may extend as far as the outer ear canal. A second branchial cleft cyst is found in the lower part of the neck between the large neck muscle, the sternocleidomastoid and the trachea (windpipe). This tract may extend as far as tonsillar area of the throat. The third branchial cleft cyst is found on the chest wall just below the collar bone. The tract of the third branchial cleft cyst is usually only a few millimeters deep.

**The head and neck of the embryo develops from clefts and arches that are present early in embryonic life.** During the seventh to eighth month of embryological life, the first branchial cleft is developing into the outer ear canal and eustachian tube. Occasionally, a remaining part of the first branchial cleft persists as a small tract. Likewise, the second branchial cleft is developing into

the tonsils during the sixth to seventh week of life and a small tract may persist that develops into a second branchial cleft cyst. The third branchial cleft develops into the thymus and parathyroid and occasionally a remaining part of the third branchial cleft may persist as a small tract that is found on the chest just below the collar bone.

### **Indications for Surgery**

**Infection is the main indication for a removal.** A branchial cleft cyst may become infected when the child has a sore throat, cold or ear infection. The reason for this is that the cyst is located in the neck near a vast supply of lymph nodes that monitor all infections in the head and neck area. Once infected the branchial cleft cyst will enlarge, begin to drain thick yellow fluid and the skin over the cyst may become red and swollen. Infected cysts are treated with oral antibiotics and warm compresses. Occasionally, the infected cyst may need to be opened and drained. After all the infection has resolved the entire branchial cleft cyst is removed.

### **Surgery and Home Care**

**Surgery is done on an outpatient basis and requires a five to six hour hospital stay.**

**The surgery is done through an elliptical incision** around the opening of the branchial cleft cyst. Bleeding and infection are minor surgical risks. Rarely a branchial cleft cyst/sinus tract may recur. A small drain may be left in the wound for 24 to 48 hours. The drain is easily removed in the surgeon's office at the first follow up visit. The only restriction after surgery is that the incision must stay dry for two to three days.

*Disclaimer: Your child's condition is unique. The information contained on this web site is not intended to substitute for advice from a doctor or nurse. If you are unsure about any aspect of your patient's care, please contact us at 303-839-6001, or talk to your pediatrician.*