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This leaflet is designed to provide you with information about the excision (surgical removal) of a second branchial cleft cyst. It explains what the procedure involves, why it might be necessary, the potential risks, and what to expect during your recovery.

### What is a Second Branchial Cleft Cyst?

A branchial cleft cyst is a type of lump that forms in the neck. It's a congenital condition, meaning it's present from birth. These cysts develop from remnants of structures that form the head and neck during a baby's development in the womb. Second branchial cleft cysts are the most common type, usually appearing under the skin of the neck muscles on either side, in the upper lateral neck, between the hyoid and thyroid cartilages.



### Why Might I Need Excision of a Second Branchial Cleft Cyst?

While these cysts are usually benign (non-cancerous), surgical removal is often recommended for several reasons:

- **Recurrent Infections:** Branchial cleft cysts can become infected, leading to pain, swelling, redness, and tenderness. Repeated infections can be disruptive and may lead to abscess formation.
- **Drainage:** The cyst may drain mucus-like fluid, which can be bothersome.
- **Cosmetic Concerns:** The cyst may be visible as a lump in the neck, causing cosmetic concerns for some individuals.
- **Rare Risk of Malignancy:** Although rare, there is a very small possibility of a branchial cleft cyst becoming cancerous.
- **Pressure Symptoms:** If the cyst grows large, it could press on nearby nerves or blood vessels, potentially causing symptoms like difficulty swallowing, noisy breathing (stridor), or even secondary hypertension.

### What Happens Before Surgery?

1. **Pre-assessment Clinic:** You'll attend a pre-assessment clinic where you'll have blood tests and possibly a heart trace (ECG) to ensure you're fit for anaesthesia.
2. **Medical History:** The nurse practitioner will ask about your general health, medications, and any allergies.
3. **Fasting:** You'll be instructed not to eat or drink for at least six hours before the operation.
4. **Consent Form:** You'll be asked to sign a consent form, confirming you understand the procedure and its risks. You'll have the opportunity to discuss any concerns with the nurse practitioner or surgeon.
5. **Imaging:** You may have had imaging studies (ultrasound, CT scan, or MRI) to help the surgeon plan the procedure.

### What Happens During Surgery

1. **General Anaesthesia:** The surgery is performed under general anaesthesia, meaning you'll be asleep and feel no pain.
2. **Incision:** The surgeon will make an incision in your neck, usually along a natural skin crease to minimize scarring.
3. **Cyst Removal:** The surgeon will carefully remove the entire cyst and any associated tract (a small channel that may connect the cyst to the skin or deeper tissues). The tract of a second branchial cleft cyst may extend between the internal and external carotid arteries, towards the tonsil region. Careful dissection is required to remove the entire tract and prevent recurrence.
4. **Drain (if needed):** In some cases, a small, temporary drain may be placed in the wound to remove excess fluid or blood.
5. **Closure:** The incision will be closed with sutures (stitches). These may be dissolvable or may need to be removed later.

### What Happens After Surgery?

1. **Recovery Room:** You'll be monitored in the recovery room until you're awake and stable.
2. **Ward:** You'll be transferred to a ward, where nurses will check your vital signs (pulse, blood pressure, breathing) and wound regularly.
3. **Pain Management:** You'll be given pain medication as needed.
4. **Drip (if needed):** You may have a drip (intravenous line) for fluids.
5. **Drain Removal (if applicable):** If a drain was placed, it will be removed by the doctor before you go home, usually within a day or two.
6. **Diet:** You'll be advised when to start drinking and eating. Start with sips of water and progress as tolerated.
7. **Positioning:** You may be asked to lie in an upright position to help with drainage.
8. **Neck Movement:** Gentle neck movements are encouraged to prevent stiffness.
9. **Discharge:** You'll likely be discharged from the hospital within one or two nights, depending on your recovery.

### What are the Potential Risks and Complications?

All surgical procedures carry some risks. While complications from branchial cleft cyst excision are uncommon, they can include:

- **Infection:** Wound infection can occur, requiring antibiotics.
- **Bleeding/Bruising:** Some bruising is expected, but excessive bleeding is rare.
- **Recurrence:** There's a small chance the cyst could re-occur, requiring further surgery.
- **Scarring:** A scar is inevitable, but surgeons aim to minimize its appearance. Some individuals may develop a keloid scar (raised and thickened scar).
- **Nerve Damage:** There's a very small risk of temporary or permanent damage to nearby nerves. This could potentially affect shoulder movement, tongue movement, lip movement, or voice. The surgeon takes great care to protect these nerves. Numbness around the scar is common and usually resolves.
- **Neck Stiffness:** Temporary neck stiffness can occur, but gentle exercises help.
- **Anaesthesia Risks:** General anaesthesia has its own risks, which the anaesthetist will discuss with you. These can include nausea, confusion, and, very rarely, more serious complications.
- **Damage to teeth:** There is a risk of damage to teeth, particularly caps or crowns and veneers.

### Long-Term Outlook

The long-term outlook after successful excision of a second branchial cleft cyst is excellent. Most patients experience complete resolution of their symptoms and have no long-term complications.

## Recovery and Returning to Normal Activities

- **Pain Relief:** Take prescribed pain medication as directed.
- **Wound Care:** Keep the wound clean and dry. Avoid makeup and perfumed creams on the area. If you have skin glue over the top, you can shower straight away but be sure to dry this after and avoid rubbing the glue off for the first couple of weeks.
- **Stitch Removal:** If you have non-dissolvable stitches, you'll be advised when and where to have them removed.
- **Scar Massage:** Once the glue has fallen off or the stitches are removed, gently massage the scar with a non-perfumed moisturizing cream to help it heal.
- **Sun Protection:** Protect the scar from direct sunlight for at least 12 months, using sunscreen.
- **Activity:** Avoid strenuous activity and heavy lifting for a few weeks.
- **Return to Work:** You can usually self-certify for the first seven days of sickness. A fit note (medical certificate) can be provided by the hospital if needed. The typical time off work is around two weeks, but this depends on your job.
- **Follow-Up:** You'll have a follow-up appointment with your surgeon to check on your healing.

**Living with a Removed Branchial Cleft Cyst** Once the cyst is removed and you have fully recovered, you should not experience any further problems related to it.

**When to Seek Medical Advice** Contact your surgeon or seek medical attention if you experience:

- Fever
- Increasing pain that is not controlled by medication.
- Excessive swelling, redness, or drainage from the wound.
- Any concerns about your recovery.

This leaflet provides general information and should not replace a discussion with your healthcare provider. Your surgeon will discuss your specific case and answer any questions you may have.