Neck Dissection

A surgeon systematically removes lymph nodes in the neck so that a pathologist can determine if they are cancerous. Removing lymph nodes from the neck does not harm your immune system or alter your body’s ability to fight infection.

**Elective** neck dissections are performed in order to determine if cancer from other parts of the body, such as the mouth, has spread. **Therapeutic** neck dissections treat lymph nodes with known metastasis.

**Before Surgery**

You will receive specific instructions from your physician for how to appropriately prepare for the procedure, such as when to arrive and food/drink restrictions. A few days before your operation, the anesthesiologist will ask you a few questions so that they can create a comprehensive anesthesia plan based on your medical history. On the day of your surgery, you will arrive at the hospital a few hours before your scheduled procedure. The nurses, anesthesiologist, and head and neck surgery team will check in with you. If you have any last minute questions, this is a good time to ask them.

**The Surgery**

Multiple approaches exist for neck dissection depending on the location and size of the primary cancer, as well as whether or not the cancer has spread to the lymph nodes:

**Radical Neck Dissection:** This procedure involves the removal of lymph nodes in Levels I through V (see image above), as well as the sternocleidomastoid muscle (SCM), internal jugular vein, and spinal accessory muscle.

Please note that this information is intended for educational purposes. It does not replace consultation with your doctor, and it should not be interpreted as medical advice. We encourage you to speak to your health care provider if you have further questions or concerns regarding your medical care.

For more information scan this code or visit: [https://thancguide.org/cancer-basics/treatments/surgery/ablative/neck-dissection/](https://thancguide.org/cancer-basics/treatments/surgery/ablative/neck-dissection/)
**Modified Radical Neck Dissection:** Modified radical neck dissections require the removal of lymph nodes in Levels I through V, while sparing at least one or more of the three additional structures taken during a radical neck dissection.

**Selective Neck Dissection:** These dissections remove specific lymph nodes without necessarily sacrificing non-lymphatic structures.

- In a **supraomohyoid neck dissection**, only nodes from Levels I, II, and III are removed.
- In a **lateral neck dissection**, only nodes from Levels II, III, and IV are removed.
- In a **posterolateral neck dissection**, only nodes from Levels II, III, IV and V are removed.

**Central Compartment Lymph Node Dissection:** This procedure is commonly performed in cases of thyroid and laryngeal cancer. It involves the removal of nodes in the central compartment (Level VI).

**Salvage Neck Dissection:** This procedure is performed if you have had previous neck treatments (i.e. radiation or chemotherapy) and have recurrent or persistent cancer remaining.

When operating on advanced tumors, the surgeon may need to additionally remove parts of the **carotid artery** during the dissection or replace some of the tissues of your neck with a graft or flap.

In rare cases, a tracheostomy may be performed to make sure you can breathe after surgery. This is usually temporary and will be removed before discharge from the hospital.

There are specific risks associated with neck dissection surgery:

- Bleeding, including hematoma (mild bleeding under the skin).
- Infection.
- Seroma (collection of normal body fluid upon removal of the surgical drain).
- Nerve damage (ear numbness, lower lip weakness, tongue numbness or weakness, shoulder weakness, hoarse voice).
- Lymphatic fluid leakage from the drain in your neck.
- Facial swelling.
- Blood clots.

**After Surgery**

When you wake up, you may have a drain in your neck to remove excess fluid and secondarily prevent infection. You may return home after a few days, or you may stay at the hospital a week or more, depending on the extent of the surgery.

Please note that this information is intended for educational purposes. It does not replace consultation with your doctor, and it should not be interpreted as medical advice. We encourage you to speak to your health care provider if you have further questions or concerns regarding your medical care.