National University Hospital

NECK DISSECTION

Patient and Family Information

Information is correct at time of printing [Jun 2026] and subject to revision without prior notice.

What is neck dissection?

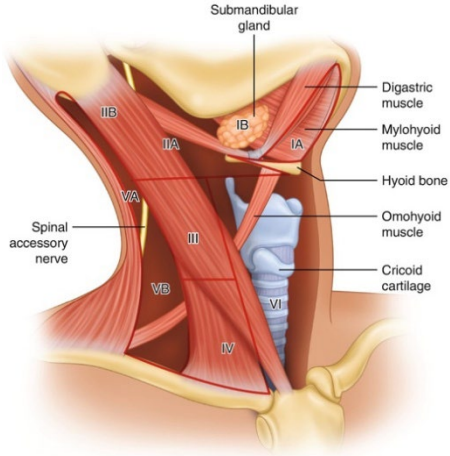

Image source: Transaxillary robotic modified radical neck dissection

Neck dissection is a procedure that involves the surgical removal of lymph nodes in the neck.

What are the indications for this surgery?

- Cancer has spread from a primary site, involving the lymph nodes of the neck.
- The risk of lymph node metastasis to the neck is very high based on the features of the primary tumour.
- Tumours of the neck require removal.
- Access to deeper parts of the neck is required.
- A need to attain vessels of the neck for vascular support of other procedures (e.g. flap reconstruction).

How is this surgery performed?

The surgery is performed under general anaesthesia. A curvilinear incision on the side of the neck that may extend beyond the midline. The skin flaps are raised, and the critical structures of the neck are then identified in a systematic fashion. The lymph node and associated fat are then dissected free from these structures. In cases whereby the tumour is invading the surrounding structures, this may be resected to allow for a complete removal of the cancer. Following the removal of the lymph nodes, surgical drains will be placed in the wound.

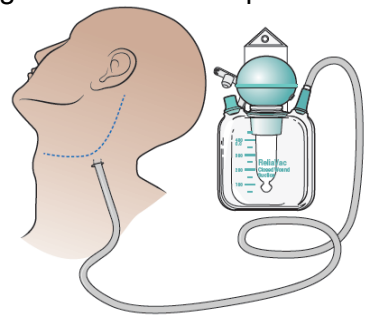

Image source: https://www.mskcc.org/cancer-care/patient-education/neck-dissection

What are the risks associated with this surgery?

There are potential complications associated with any surgery. This may pertain to the administration of general anaesthesia or the surgical procedure itself.

Some potential complications include:

- Bleeding — the neck contains multiple large vessels and bleeding may be encountered during the surgery. Bleeding into the wound after the operation may sometimes occur after surgery and may require return to the operating room to stop bleeding.
- Wound infection — this causes pain, redness, swelling, and discharge around the wound.

- Numbness of upper neck/earlobe — most patients feel some numbness of the upper neck/earlobe after surgery. This does improve with time but in some patients this may be persistent.
- Facial nerve weakness — in some cases, dissection of nerve that supplies the muscle to the lips/cheek may result in temporary facial weakness of the lip and cheek. For some patients, this weakness may persist.
- Shoulder pain/weakness — the spinal accessory nerve lies in the upper part of the neck and may be injured during a neck dissection. This may lead to pain and weakness of the ipsilateral shoulder and arm.
- Tongue weakness — the nerve to the tongue muscles run through the neck and may be injured during surgery, causing changes when eating and speaking.
- Voice changes — the nerve supply to the voice box runs adjacent to the large vessels of the neck and injury to this nerve may lead a voice change.
- Chyle leak — the thoracic and jugular ducts are tiny structures in the lower neck that transports protein rich nutrients from the digestive tract to the large vessels of the neck. Rarely, this may be injured during the surgery and may require an interval period of altered dietary intake to allow healing. Some patients may also require secondary procedures to treat this leak.
- Scarring
- Post-operative pain
- Anaesthetic risk

What can I expect immediately after surgery?

You will usually be admitted to the hospital after surgery. There will be surgical drains attached to the drain bottles. These will be kept in the wound until the drainage volumes are low.

You may experience some pain over the wound which are usually controlled with pain medications. You should be able to eat, drink, and ambulate normally on the same day after the surgery.

How should I manage the wound after discharge?

You should keep the wound dry as much as possible for the first week. Clean the wound gently with a wet towel to remove dried blood stains/crust on the wound. There is no need to restrict the movement of the neck and gentle movement of the neck and shoulder is advised. Monitor for signs of infection such as pain, redness, swelling, or discharge.

Medications will be prescribed for pain. You may also be given oral antibiotics and topical ointments for the wound. Take these medications as prescribed by your surgeon.

You will be given an appointment to return to the clinic for a review. If there are any concerns regarding the wound after the surgery, please contact us or visit the emergency department if it is outside of office hours.

Should you have any pre or post operation queries, please call us at 6772 4551 or email us at ent_fc@nuhs.edu.sg.

For urgent medical attention, please walk into the clinic during operating hours (Monday to Friday, between 8.30am to 5.30pm) or visit the Emergency Department after clinic hours.

National University Hospital

5 Lower Kent Ridge Road, Singapore 119074
OneNUHS Hotline: (65) 6908 2222
OneNUHS General Enquiries: contactus@nuhs.edu.sg
OneNUHS Appointments: appointment@nuhs.edu.sg
www.nuh.com.sg