

NECK DISSECTION INFORMED CONSENT

The operation you are having is called a “neck dissection.” This operation involves removing the lymph nodes in your neck that may be or have been affected by cancer. There are several types of neck dissection, and this will be explained below in more detail. The type of neck dissection you will have depends on the extent of cancer, where the cancer started, and if you are having other treatment.

What are lymph nodes? The lymphatic system consists of a network of vessels and nodes which carry a substance called lymph around the body. The main function of lymph nodes are to help the body fight infection. Lymph nodes in the neck are ‘glands’ that become enlarged when you have an infection such as a sore throat. In addition to infection, cancers of the mouth, throat, and neck can spread into lymph nodes and sometimes cause them to become enlarged. Often, an important part of treating cancer of the head and neck includes removing these nodes involved with cancer.

Before your operation, the surgeon will explain the type of neck dissection you’re going to have. The surgeon is guided by the size and location of the involved lymph nodes in your neck. During the operation, the surgeon will make an incision in your neck, which begins just below your ear and extends downward towards the center of your neck. This will provide exposure to the lymph nodes in your neck.

Types of neck dissection:

Selective neck dissection: Lymph nodes from certain areas of the neck are removed, without removing large muscles, veins, or nerves. The regions of your neck where lymph nodes are removed will depend on the location of the initial tumor.

Comprehensive or modified radical neck dissection: All or most of the lymph nodes groups in the neck are removed. Often, muscles and veins are also removed with the lymph nodes, but in select cases, they may be left intact. The nerve that controls shoulder strength in your neck is not removed.

Radical neck dissection: All the lymph nodes in the neck are removed. Other tissues, such as muscles, veins, and the spinal accessory nerve (see below) are removed with the lymph nodes. Occasionally, the surgeon may also remove other tissues such as a portion of skin, if it is affected by the tumor.

Despite neck dissection having many potentially serious risks, they occur very infrequently, and the surgical procedure is usually performed without difficulty. Most patients typically leave the hospital within two to five days after surgery. In addition, although substantial tissue involved with cancer is removed from the patient’s neck, this operation does not generally lead to a dramatic degree of disfigurement or dysfunction.

There are multiple **nerves** in the head and neck that are exposed during neck dissection surgery, and therefore, placed at risk during the surgery:

- Injury to the **facial nerve** can lead to temporary or permanent facial weakness to the lower lip on the surgical side.
- Depending on the type of neck dissection performed, you may have a temporary or permanent weakness to your shoulder. As stated above, sometimes the **spinal accessory nerve** is removed as a planned part of the neck dissection. This nerve gives you strength to your shoulder muscles, allowing shrugging and full raising of your arm. Removal of this nerve typically occurs only if it is necessary to safely and more effectively eradicate the tumor. Typically chronic shoulder pain occurs after removal of this nerve. After removal of the spinal accessory nerve one will often require physical therapy post-operatively in order to minimize chronic pain in your shoulder after surgery. Even when preserved, up to 50% of patients may experience temporary shoulder weakness and/or discomfort.

- Injury to the **vagus nerve**, though rare, will result in hoarseness, swallowing troubles or throat dysfunction after surgery.
- One half of your diaphragm may be paralyzed if the **phrenic nerve** is injured during surgery. Although in some cases it is not that symptomatic, it can lead to chronic shortness of breath.
- Injury to the **lingual nerve** will result in numbness to one half of your tongue, but the tongue will have normal mobility.
- Conversely, injury to the **hypoglossal nerve** will cause weakness or paralysis to one half of the tongue. The tongue will retain normal sensation, and with speech and swallowing therapy, normal or near-normal function can be re-established.
- With most neck dissections, one or multiple **sensory nerves** are removed during the surgery. You may experience permanent numbness to the ear, lower face, neck or shoulder skin. Removal of these nerves is a planned part of the neck dissection, and does not represent a complication. In addition, it does not alter one's appearance.
- On occasion, larger **lymph vessels** are encountered during surgery. Care is taken to prevent leakage of lymph fluid, however if this occurs post-operatively, further surgery may be required to control this problem. In addition, you may notice intermittent, but long-term swelling of your skin and face after neck dissection. This can be improved by sleeping upright for a couple of nights.
- Significant **bleeding** is rarely encountered during neck dissection surgery. Despite this, there is a small chance of excessive blood loss possibly needing transfusion. If carotid artery injury was to occur you may suffer a stroke, or this could be a fatal event.

Poor scarring or poor healing can occur, especially if you have already received radiation therapy. On occasion further surgery is necessary to correct this problem. Your operation will be carried out under a general **anesthetic**. As with any type of surgery, the risks of anesthesia such as drug reaction, breathing difficulties and even death are possible. Please feel free to discuss any specifics of the anesthesia with your anesthesiologist.

I/We have been given an opportunity to ask questions about my condition, alternative forms of treatment, risks of non-treatment, the procedures to be used, and the risks and hazards involved, and I/we have sufficient information to give this informed consent. I/We certify this form has been fully explained to me/us, and I/we understand its contents. I/We understand every effort will be made to provide a positive outcome, but there are no guarantees.

Signature: _____ Date: _____

Print name: _____

Witness: _____