**NECK DISSECTION**

**Purpose:** Patients with cancer of the head & neck often have the cancer spread to the lymph nodes in the neck. The primary cancer site can be treated with surgery, radiation therapy, chemotherapy or a combination of all. Likewise, the lymph nodes can be treated with surgery, radiation therapy, or a combination of all. A neck dissection is an operation performed to remove the lymph nodes from one side of the neck. It can be included as part of an operation to remove the primary cancer or can be done as a separate procedure. You may have heard a variety of terminology for this procedure including radical neck dissection, modified radical neck dissection, limited neck dissection, functional neck dissection, or selective neck dissection. Each of these terms refers to minor variations in technique and the range of what is actually moved.

**Procedure:** The operation is done in the hospital under general anesthesia. Incisions are made extending from behind the area and come across the front of the neck in a skin crease. One or multiple zones of lymph nodes are removed. The sternocleidomastoid muscle (rope like vertical muscle in neck), internal jugular vein (large vein in neck) or spinal accessory nerve (never to shoulder muscle) may be removed or preserved depending on the extent of the cancer. At the conclusion of the procedure a drain is placed to prevent formation of a blood clot underneath the skin. The incision is closed to minimize scarring. The incision is closed with staples or sutures. The patient recovers in the Post Anesthesia Care Unit (PACU). Patients stay two to three days in the hospital after the procedure barring problems. The drain will be removed when drainage is minimal. If the neck dissection is the only procedure performed a diet can be resumed quickly and you should go home in two to three days. If other cancer surgeries are performed you may expect to stay in the hospital for one to two weeks.

**Recovery:** After discharge from the hospital patients should rest at home with the head elevated. This helps to reduce swelling, bleeding, and discomfort. You should expect mile to moderate neck pain. If this was the only procedure you can expect to resume a normal diet at home. The incision should be cleansed with peroxide twice a day. A light coating of antibiotic ointment may be applied after cleansing. The stitches or staples will be removed during your office visit one week after the surgery. Most patients miss two weeks of work or school after surgery. The neck of face may have some mild swelling that can take several weeks to resolve. If the area is radiated, then this period is lengthened.

**Risks and Complications:** This section will highlight what we consider the most important risk of the procedure. Other complications are also possible. Please talk to one of our doctors if you have more questions.

- **Incomplete Removal of Cancer/Recurrence of Cancer:** As with any treatment for cancer there is a chance that the surgery performed is not enough to remove it completely. Recurrences are treated with more surgery, radiation, or chemotherapy.

- **Damage to Nerves:** Many nerves travel in the neck. Attempts are made to prevent damage to many of these nerves; nonetheless, some patients experience weakness. All patients have numbness around the incision and near their ear. The skin sensory nerves are routinely cut during the procedure. Some patients have return or sensation, but this may take up to a year to occur. The spinal accessory nerve moves the trapezius and sternocleidomastoid muscles. If cut, there may be permanent weakness and pain in the shoulder. With modern practice this nerve is rarely intentionally removed or cut. There are times, however, when this nerve must be removed. Other nerves control the tongue, the diaphragm, muscles to the lip, muscles of swallowing, muscles to the voice box, and sensation to the voice box. If these are damaged, there may be temporary or permanent disability to swallowing, speech, or even breathing. These problems are rare when neck dissection is performed alone, but may be expected if performed in conjunction with a larger cancer surgery.

- **Thoracic Duct Injury:** The thoracic duct contains lymph and travels low in the neck, more times on the left than the right. This is a flimsy structure that can be cut during removal of the lower lymph nodes. If this structure leaks further treatment may be necessary and the hospitalization can be prolonged. This is a very rare event (less than 1%).

- **Bleeding or Infection:** These are possible with all types of surgery. If neck dissection is done alone, transfusion is rarely required in an otherwise healthy individual. If done in conjunction with other surgery or if you are otherwise debilitated a transfusion may be necessary. Antibiotics may be given to avoid infection.

- **Undesired Scarring:** Despite careful technique it is still possible for the incision to heal with an unsatisfactory appearance. Scar revision is possible if this occurs.

- **Flattened Appearance:** Because structures of the neck are removed, some patients have a flattened appearance to the neck.

- **Pain:** As with any surgery some pain is expected. In this case, it is usually mild and resolves in the first few weeks after the surgery. Permanent pain can occur, but is rare. Stiffness is often present (radiation makes it worse).
We ask that you sign below to indicate that you have read, understand, and accept the risks and most but not all of the possible complications of the proposed operation. Alternative treatments have been discussed with me. I agree to proceed with the surgery.