

## Patient Education Literature

We recommend that you read this handout carefully in order to prepare yourself or family members for the proposed procedure. In doing so, you will benefit both the outcome and safety of the procedure. ***If you still have any questions or concerns, we strongly encourage you to contact our office prior to your procedure so that we may clarify any pertinent issues. An educated patient is the best patient.***

### Radical Neck Dissection

#### Definition

Radical = complete removal of

Dissection = the surgical removal along natural lines of cleavage of tissues which are or might become diseased

This procedure involves removal of all the lymph nodes in the neck along with other structures when determined to be appropriate by your physician. The other structures may include muscles and the salivary gland that is located under the side of the jaw and is called the submandibular gland.

#### Purpose of Procedure

The purpose of this procedure is to remove known or suspected lymph nodes containing cancer that have spread from the primary tumor site. Its purpose is to prevent further spread of the disease to other parts of the body, and over the past 50 years it has proven to be an effective method of head and neck cancer control.

#### Preparation

As with any procedure in which anesthesia is administered, you will be asked not to eat or drink anything after midnight on the evening prior to your surgery. If you are on medications that must be taken, you will have discussed this with us and/or the anesthesiologist and instructions will have been given to you. The procedure will not be performed if you are currently taking, or have recently taken any medication that may interfere with your ability to clot your blood (blood thinners, aspirin, anti-inflammatory medicines, etc...). ***Please refer to the attached list and tell us if you took any of these within the past 10 days.*** If your new medication is not on the list, alert us immediately so that we may ensure optimal procedure safety. We will have reviewed all of your current medications with you during the pre-operative consultation. You are obligated to inform us if anything has changed (medication or otherwise) since your previous visit.

#### Procedure

This procedure involves making an incision in the neck. If this operation is being done along with removal of other structures, the incision position will vary according to the preference of your surgeon. Local anesthetic may be injected to control bleeding. The incision is extended down through the soft tissue and through the thin muscle called the platysma. Underneath this muscle is a nerve that provides movement to your lower lip and will be protected unless it lies too close to the affected areas. The large muscle, called the sternomastoid, that extends from below your ear to your collar bone and breast bone is cut at the point of attachment to these bones. A large vein, called the internal jugular, that runs through this area is also cut and tied carefully to avoid leakage of air back to the heart and bleeding. Careful removal begins at the collar bone and proceeds upward. Small blood vessels and small nerves that provide sensation to the skin are cut. The lymph tissue, fat, and some small muscles are then separated from their attachments and retracted to allow further removal in the upper neck. The nerves to the

tongue, voice box, and shoulder are preserved if possible. The lymph tissue and fat in the upper neck area are separated from their attachments to the muscles under the jaw. At this time the upper segment of internal jugular vein is cut and tied near its point of exit from the base of the skull. The upper portion of the sternomastoid muscle is separated from its attachment to the bone beneath the ear. The chain of lymph tissue, fat and small muscles are removed in one piece. Suction drains are placed to remove blood accumulation and improve healing of the tissue. The skin is closed with sutures.

### **Post Procedure**

Following this procedure you will be transferred to a hospital room. Antibiotics will be continued for 24 to 48 hours. Pain medication will be given to manage discomfort. The suction drains are left in place until drainage is minimal which may take two or three days. Discharge from the hospital will occur when the drains are removed and you can move around without assistance. Elevate the head as much as possible. Sit in a recliner or use two or three pillows when sleeping. Head elevation reduces bleeding and swelling. Follow up appointments will be scheduled on a regular basis. Water exposure should be avoided until the sutures are removed. Sutures will be removed in 10 to 14 days.

Post-operative pain medications may include a codeine type medication that may cause drowsiness. Operation of motor vehicles or machinery is not allowed while using this medication. Returning to work or school can occur as soon as pain medication is no longer needed during the day.

### **Expectations of Outcome**

This operation is performed to remove known or suspected lymph nodes containing cancer that has spread from the primary tumor site and its purpose is to prevent further spread of that disease to other parts of the body. Further treatment including radiotherapy or chemotherapy may be necessary.

### **Possible Complications of the Procedure**

This is a safe procedure, however, there are uncommon risks that may be associated with it. While we have discussed these and possibly others in your consultation, we would like you to have a list so that you may ask questions if you are still concerned. It is important that every patient be made aware of possible outcomes that may include, but are not limited to:

- Anesthesia complications: There is always a small risk with general anesthesia. This risk is increased if there is any family history of trouble with anesthesia. The risks can range from nausea and vomiting to very rare life threatening problems. You can discuss any questions with your anesthesiologist.
- Bleeding
- Infection
- Wound breakdown
- Scarring
- Injury to nerves controlling the lower face, throat, shoulder, tongue, diaphragm
- Skin sensation under the ear and jaw
- Shoulder weakness and/or pain in the neck
- Chylous fistula, which is leakage of a milky fluid absorbed during digestion and carried in a duct that passes from the intestines into the jugular vein. The leakage occurs if the duct is injured during the procedure.

Except for nerve injuries, these complications can be successfully managed. Quality of life after radical

neck dissection is only minimally affected. The major permanent undesired effects are some shoulder weakness and pain in the neck and a surgical scar, but they are a small price to pay for cancer cure. Other complications naturally relate to the risks of any major surgery in older or debilitated patients, and for that reason, a medical consultant may be asked to assist the surgeon in post-operative management.

We provide this literature for patients and family members. It is intended to be an educational supplement that highlights some of the important points of what we have previously discussed in the office. Alternative treatments, the purpose of the procedure/surgery, and the points in this handout have been covered in our face-to-face consultation(s).