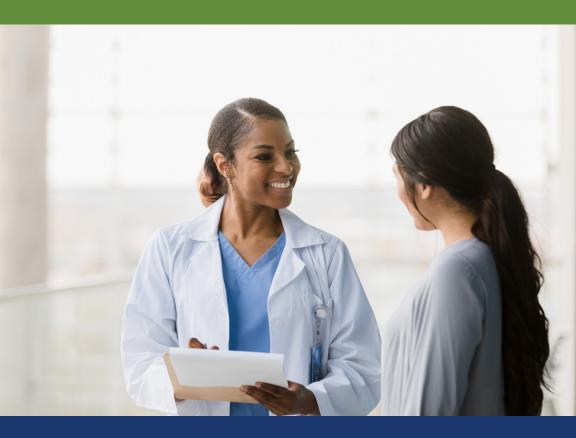
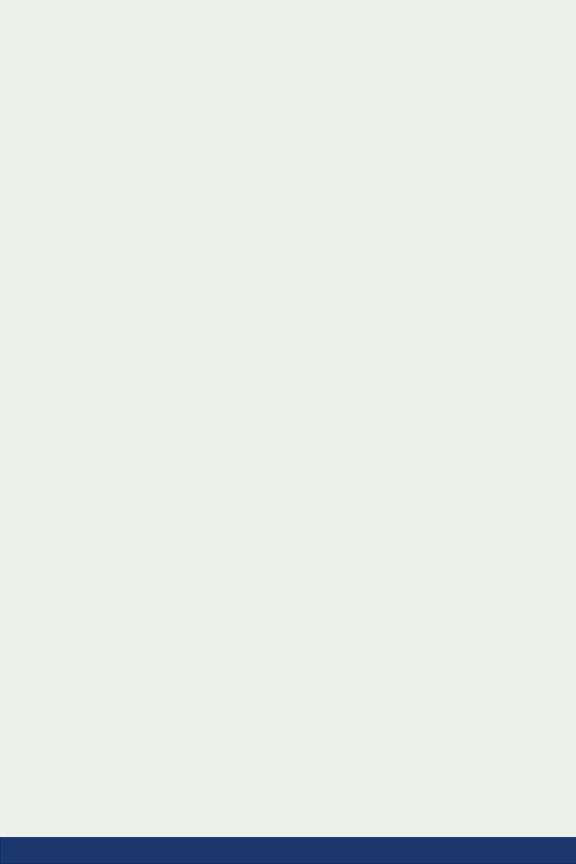
NECK DISSECTION SURGERY

Johns Hopkins Otolaryngology– Head and Neck Surgery









What is a neck dissection and why do I need it?

- Cancers of the head and neck can drain into lymph nodes in the neck. A
 neck dissection is removal of lymph nodes from your neck that may have
 cancer.
- A neck dissection is performed to determine the number of lymph nodes that have cancer (or not). The procedure results also help in planning more treatments that may be needed.
- A neck dissection may be done alone or with other procedures, depending on your case.

What possible complications can happen?

Every neck dissection results in some degree of neck stiffness, numbness and soreness. How much and how long these are experienced varies. They are not considered complications.

Complications that may happen depend on how much surgery you have, the tumor and other factors. In general, the complication rate for neck dissection is low. Possible complications are listed below. Please discuss with your surgeon which ones are more likely based on your surgery. This booklet is meant to give you information to make conversations with your surgery team more helpful.

Seroma

- A seroma is fluid that can collect under the skin in the surgery area. A
 drain is placed in the neck to lower the chance of developing this.
- Depending on the size and location of the fluid collection, it can be managed by needle drainage, applying a pressure dressing and/or replacing a drain in the area.

Hematoma

- Bleeding is a possible complication after every surgery.
- A blood collection in the neck can cause trouble breathing and swallowing and may need to be drained at the bedside in the hospital room or in the operating room.

Shoulder weakness

- The lymph nodes which are removed are in close proximity to or intimately associated with a nerve that helps move your shoulder.
- Even though we treat the nerve with care, you may have pain or
 weakness after the procedure when shrugging your shoulders or when
 raising your hands over your head. Usually, the weakness is temporary,
 but it can be permanent. While the nerve is recovering, it is important
 to do shoulder exercises.
 - If the nerve needs to be removed (due to the cancer), the shoulder blade on the side of the surgery may look uneven.
 - Physical therapy is very helpful for your shoulder range of motion. Even when the nerve that helps move your shoulder is healthy, exercises are recommended to prevent a frozen shoulder. A physical therapist or occupational therapist will see you after your surgery to show you how to do exercises. You may also find helpful exercises at ahns.info/survivorship_intro/shoulder-dysfunction.
- More information on the exercises is at the end of this pamphlet.

Lower lip weakness

 A small branch of the facial nerve in your neck helps you move the lower lip. Every effort is made during surgery to protect this nerve.

- Weakness of this nerve may lead to drooping of the corner of your mouth. You may notice an uneven smile. Drooling occurs in rare cases.
- Weakness is usually temporary, but in rare cases, it can be permanent.
 If the nerve was not purposely cut or removed because of the tumor,
 this weakness should improve in three to six months, but it can take
 up to a year.
- If the lip does not get better, you will meet with a facial plastic surgeon who may be able to restore function.

Tongue weakness

- A nerve in your neck helps you move your tongue.
- Weakness of this nerve may lead to weakness moving the tongue on the same side as the neck surgery.
- The nerve weakness, which is usually temporary, may cause some difficulty with eating or with saying certain words clearly. If the nerve was not removed or injured because of the tumor, this weakness will get better over a few months, but it can take up to a year.

Chyle leak

- Chyle is a milky fluid made in the gut when fat is digested. It is carried in lymphatic vessels that empty into small channels in your neck.
- A chyle leak may happen when these channels are cut during surgery. It
 is more common on the left side than the right side of the neck.
- Chyle fluid may cause problems regarding wound healing and nutrition.
 It can usually be treated with changes in diet.
- Let your doctor know if you see milky fluid in the drain. You may be asked to follow a low-fat or fat-free diet.
- If this does not correct the leak, you may be given medication, a
 pressure dressing may be put on the neck and, in rare cases, a feeding
 tube will be placed.
- For very large leaks that do not respond to diet changes or medications, surgery may be needed.





Will I have a scar?

- You will have a scar that hides in a natural skin crease in your neck. It will be visible at first after surgery, but hopefully, it will become barely noticeable over time.
- The scar is made as small as possible while allowing good access to the structures in the neck.
- Development of thicker or darker scars depends on patient factors. Use of silicone-based gels that you can buy over the counter is recommended to minimize the scar over time. Avoiding sun exposure for one year after surgery is also suggested.

Does this treatment follow published guidelines?

We follow the most updated guidelines provided by the National Comprehensive Cancer Network.

What will I need to do to prepare for surgery?

- For your safety, you cannot eat or drink anything after midnight on the day of your surgery.
- Your doctor will let you know which medicines you may need to stop taking on the day of surgery or sooner.
- Our nurses will contact you to review what to expect and to go over

- instructions for how to take care of the surgery area after the procedure.
- Ask a family member or friend to pick you up from the hospital when you are ready for discharge and to help you at home for the first few days.

What other medical teams will be involved in my care?

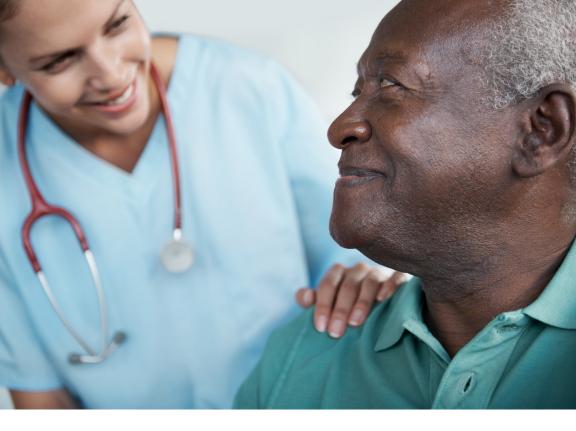
- We work as a team with speech-language pathologists, radiation oncologists, medical oncologists, radiologists, pathologists, nurses and many others. You may meet members of the team before surgery so you can better understand your treatment options and so we can help you develop your personalized care plan.
- Not all patients need treatment from radiation and/or medical oncologists.
 It depends on the cancer. However, these doctors are involved in talking about your cancer even if they do not treat you directly.
 - Radiation oncologists are experts in the planning and delivery of radiation to target cancer. There are many ways to deliver radiation, and they have different side effects. Your radiation oncologist will talk with you about these side effects, and will help you manage them.
 - Medical oncologists are experts in providing drugs that target the whole body to help treat cancer and in managing the drugs' side effects. These drugs may include terms such as chemotherapy, immunotherapy and targeted therapy depending on the type of medicine used.

Will I need general anesthesia?

Yes, this procedure requires general anesthesia.

When will I find out about my final pathology results?

A pathology report is usually ready several weeks after surgery. You will
get your results in Epic MyChart at the same time your care team gets
the results. If anything is unexpected about your pathology, a member of



the team will contact you within 48 hours. Pathology results are discussed with the team during tumor conferences and with you at the clinic visit after your surgery.

• The pathology results guide next steps in treatment or surveillance.

How will I feel after surgery?

- Patients experience recovery at different rates. You may feel tired for the
 first couple weeks after surgery. Be kind to yourself it is important
 to give yourself time to rest and recover. Remember that a lot of the
 discomfort you experience initially is temporary and will improve with
 time, and that your experiences are shared by others who have had neck
 surgery.
- Some throat discomfort is expected from having a breathing tube during surgery. Overall, the pain can be managed by exercises and by medications provided by your treatment team.

How long will I be in the hospital?

- You are usually in the hospital overnight after this surgery. If you feel well,
 if you can eat and drink enough, if your pain is controlled, if you urinate
 enough and if you are comfortable taking care of your drain, you may be
 able to leave the hospital the day after the surgery.
- Some patients need a little longer time in the hospital to safely recover.

What is normal after surgery?

- A sore throat related to the breathing tube is common (unless you had surgery to remove your voice box). Also, swallowing may feel different.
 These symptoms should get better with each day after surgery.
- Your voice may sound hoarse for the first few days. This is also related to the breathing tube and will also get better with each day.
- There may be some swelling, mild redness or puffiness around the incision.
- You may have neck stiffness.
- Many of these symptoms may last for several weeks but will eventually improve with time.

Will I have trouble sleeping?

- Some people find it more comfortable sleeping with a few pillows under their head for the first few nights after the surgery. We recommend sleeping with the head up at least 30 degrees to reduce swelling.
- The initial swelling may make it feel like you have trouble catching your breath when lying flat.
- Please let your doctor know right away if you have trouble breathing and if you have a very swollen neck.
- Some patients may have long-term sleep problems if surgery has changed the upper airway's structure and function. If you notice these changes a good resource for information can be found here: ahns.info/survivorship_ intro/sleep-disturbance-and-sleep-apnea/.



How do I care for my wound?

- If you have skin glue:
 - Keep the area clean and dry.
 - Do not pick off the skin glue.
 - The skin glue will fall off after a few weeks.
- If you have stitches:

Apply antibiotic (bacitracin) ointment and petroleum jelly (e.g., Vaseline or Aquaphor) along your stitches twice each day until they are removed.

- If you have drains:
 - A drain may be placed in the neck to remove fluid building up after surgery. While in the hospital, nurses will take care of the drain. If you leave the hospital with the drain, you will need to strip the drain, empty it and measure the fluid amount three times each day. Your nurses will teach you how to do this.
 - You will be asked to call a nurse to have your drain removed once the fluid amount within 24 hours is low enough (typically < 25 cubic centimeters). This will be included in your discharge instructions.

What about pain?

- It is normal to have pain around the throat and around the surgery site.
- Pain is expected after the surgery. The goal is to make you as comfortable as possible.
- You will be given a prescription for a small amount of pain medicine.
 - If you do not have liver problems, use acetaminophen (e.g., Tylenol or Ofirmev) first. You may need to take it every six hours. Do not take more than 4 grams in 24 hours.
 - If pain is not controlled by medication, let your doctor know.

When can I eat?

- Ability to eat is different for every patient. You may initially find it harder than normal to swallow because your neck feels tight and swollen. This is common.
- You will start with drinking clear liquids and can advance to more solid foods as you tolerate it.
- Some patients find it helpful to tuck the chin down to the chest when swallowing, or to eat thick foods such as applesauce.
- For most patients who had neck surgery, swallowing issues are temporary. Depending on your cancer and treatment, your doctor may refer you to see a speech and swallow therapist before and after treatment. Long-term effects from treatment may change the way you swallow. This is more common among patients who have other types of surgery at the same time as neck surgery or have additional therapy such as radiation after surgery.
- It is important to recognize the signs and symptoms of saliva, liquids or solid foods spilling into your windpipe.
 This can lead to serious medical problems such as pneumonia. More information can be found here: ahns. info/survivorship_intro/dysphagia-aspirationstricture/.



When can I drive?

You can drive when you are not taking narcotics and when you can quickly turn your head both ways.

When can I exercise?

- Start stretching slowly and gently the day after surgery.
- We recommend not lifting anything heavier than a milk gallon and not doing any strenuous activity for two weeks after your surgery.

When will I be able to return to work?

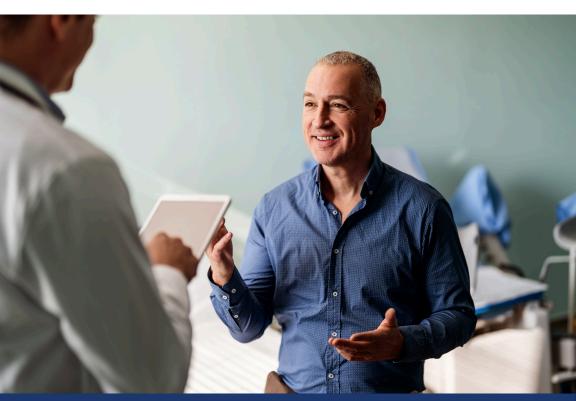
Most patients need about a week after surgery to recover at home. Those with work requiring physical exertion and long hours without rest may need longer leave. Talk to your doctor about the type of work you do.

When do I need to see the doctor after surgery?

- Make an appointment to see your surgeon about two to three weeks after your surgery.
- If you have stitches that do not dissolve, they need to be removed by the doctor's team in office about one week after surgery.

Will I require more treatment following surgery?

- Depending on your surgical pathology, you may need more treatment. This is usually discussed with a team of medical and radiation oncologists.
- You may also need additional follow-up to monitor for recurrent disease.



How do I make sure my cancer doesn't come back?

- It is important to follow up regularly with your doctor after your cancer has been treated.
- Follow-up will be more frequent in the beginning (every three months
 during the first year), but the time between follow-up visits will become
 longer as more time passes (every four months in the second year). Your
 surgeon will advise you how often you will need to be seen. Some visits
 will be shared with other specialists in the multidisciplinary team.
- You may or may not need imaging during your follow-up. Some patients who remain without symptoms do not need imaging during follow-up.
- Depending on your cancer and treatment regimen, you may need lab tests to monitor your hormone levels.
- Patients are always encouraged to follow up sooner than their scheduled times if they notice new symptoms that last longer than a few weeks, such as hoarseness, swallowing issues, mouth or throat pain, bleeding or unexpected weight loss.
- More information on surveillance of your cancer can be found here: ahns.info/survivorship_intro/ surveillance-education/.



Are more information resources available?

- The American Head and Neck Society (AHNS) website offers plentiful information regarding post-treatment care:
 ahns.info/survivorship intro/.
- The AHNS website also has general information on head and neck cancers: ahns.info/for-patients/.







Physical Therapy

After your physical therapy evaluation, your therapist may recommend continued physical therapy after your discharge from the hospital. Indications for continued physical therapy are:

- Shoulder or neck pain
- A drooping shoulder or winged shoulder blade
- Impaired shoulder and neck motion
- Impaired shoulder strength

Outpatient physical therapy may be beneficial to address the above issues, and your physician will provide a referral if needed. Outpatient physical therapy includes instructions to progress your home exercise program to maximize your shoulder range of motion and function.

To schedule an appointment for an outpatient physical therapy evaluation:

Johns Hopkins Outpatient Center

Phone: 410-955-0015 Fax: 410-614-2065

Meyer I-130 Clinic Area

Phone: 410-614-3234 Fax: 410-614-2065

If your care is provided at Suburban Hospital, your surgeon will order physical therapy with a local therapist.

If you have questions regarding outpatient physical therapy services, please call 410-955-0015 or 410-614-3234.

