

Introduction to Head and Neck Free Flap Reconstructive Surgery and FAQ's

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Introduction

Head and neck surgery with free flap reconstruction is a complex, time-consuming and detailed procedure, requiring a group of surgeons and supporting staff to accomplish success. Often there are two separate teams, one working on removal of the tumor and another team working on the reconstruction. Thus, both parts of the surgery can happen concurrently, decreasing the amount of time required under general anesthesia.

Background

Free flap reconstruction is when tissue from one part of the body is transferred to another part of the body AND the blood vessels that supply the tissue are connected into the new location. This tissue can include skin, muscle, fat, bone, etc. The blood vessels are reconnected to the blood stream with sutures so small that they are difficult to see without microscopic magnification. Hence, this surgery is also referred to as "microvascular reconstruction". Although success rates of this type of tissue transfer are very high(>95%), the patient's participation and adherence to specific postoperative instructions are essential. If a blood flow problem is encountered after surgery, it is common for the patient to return to the operating room immediately to fix this so that the tissue remains healthy. The success of the reconstruction is essential to the recovery and rehabilitation of the patient.

Preparing for surgery : FAQ's

How should I prepare for surgery?

It is important to prepare and gather as much support from family and friends as possible. Alert family and friends about the upcoming big surgery to see if you can recruit their help. The amount of help that the patient requires can be difficult to predict and it is always easier to share this burden amongst as many able-bodied people as possible. For example, help may be needed getting around the house, climbing stairs, preparing food, cleaning or showering and administering medication. You may want to have protein powder or protein drinks on hand for after surgery to help with protein supplementation. If the surgery involves the mouth or throat, a blender may be helpful for preparing softer foods while the swallow function rehabilitates.

Should I stop smoking?

Smoking has adverse effects on cancer treatments including surgery and radiation. Quitting smoking as soon as possible will have short- and long-term benefits. Smoking cessation therapy, and smoking cessation medication are both useful aids and should be used whenever possible. However, smoking cessation aids that contain nicotine need to be stopped at least a couple days before surgery as the nicotine can cause blood vessels to constrict which would be harmful to the surgery.

Can I drink alcohol?

Head and neck cancer can be made worse by alcohol consumption, even in moderation. Moderate drinking is defined as 1 drink daily for women and 2 drinks daily for men. Head and neck cancer patients should try to limit alcohol consumption as much as possible. However, abrupt changes in the amount of alcohol consumed can lead to alcohol withdrawal which is detrimental to surgery. Alcohol withdrawal is when the body goes through various changes due to the sudden decrease or absence of alcohol. The blood pressure and heart rate can have wide variations during alcohol withdrawal and delirium can occur. Studies have shown that alcohol withdrawal increases complications and your risk of death following free flap surgery. If you consume alcohol regularly, even in moderation, please discuss with your team regarding alcohol cessation protocols prior to surgery to increase your chances of a successful outcome.

What should I tell my surgeon?

Make sure to disclose any history of

- bleeding disorders
- blood clots
- easy bleeding or bruising
- family history of bleeding or clotting disorders
- medication blood thinners
- vitamins or herbal supplements
- smoking
- alcohol consumption
- trauma or surgeries anywhere in the body

If there is a history of bleeding or clotting abnormality, the surgeon may want to do a workup. It is also important to disclose any vitamins or supplements that you are taking as they can increase the risk of bleeding. If you consume alcohol regularly, please let the surgery team know this prior to surgery so an appropriate plan can be constructed for you.

It is also a good idea to tell your surgeon about your favorite physical activities or any physical activity that is especially important to you as this may affect the choice of the donor tissue for the free flap.

How long will I be in the hospital?

Most patients remain in the hospital for 4-7 days but this can vary.

What should I expect after surgery?

See link [What to expect after surgery](#)

How long will it take me to recover?

Recovery time varies widely based on the surgery performed as well as the general health of the patient. Younger and healthy patients may feel reasonable strong and back to normal functions within a few weeks after surgery. Older patients with other medical problems can take up to a few months to feel reasonably recovered.

How will taking tissue from another part of my body affect me?

With prompt physical therapy and rehabilitation, most patients recover all functions of the donor site. [link physical therapy handout***] Even when a piece of bone is taken, patients often remark that this is not noticeable and there no hindrance to daily activities. However, in the case of a very active and high functioning individual, even minor deficits can be noticeable. This can be discussed with the surgeon before the operation.