

Department of Oral and Maxillofacial Surgery

Frequently Ask Questions about Fibular Free Flap Surgery

This leaflet has been written to help your understanding of fibular free flap surgery. If you have any other questions that the leaflet does not answer or would like further explanation please ask your surgeon.

Q. What is a fibular free flap?

A fibular free flap is one way of filling a bony defect in either the upper or lower jaw. It is a common way of replacing bone that has been removed as part of cancer treatment and occasionally after severe facial injuries. A piece of bone and tissue is removed from the leg to reconstruct the jaw. There are no long term mobility problems.

Q. What does the operation involve?

1. Your surgeon will remove the fibular bone plus the adjacent soft tissue if necessary from the lower part of your leg. The fibular bone runs on the outside of the leg from the knee joint to the ankle joint. It is a small thin bone, much of which can be removed without affecting your ability to walk or bear weight.
2. The fibular bone is removed (this becomes the 'flap') along with two blood vessels, one which supplies blood to the flap (the artery) and one which drains blood from the flap (the vein).
3. Once the bone is raised, it is taken to the head and neck and secured into position with small plates and screws.
4. The blood vessels supplying and draining the flap are then joined to blood vessels in your neck using a microscope. These blood vessels then keep the flap alive while it heals into its new place.

Q. What will my leg be like afterwards?

Your leg will be placed in a bandage for one week after your operation. Occasionally, it is necessary to remove a piece of skin from the leg as well. If a large piece of skin is removed, it will be replaced with a skin graft.

Q. What can I expect after the operation?

The area of your leg, where the bone was removed, is likely to be uncomfortable. Regular painkillers will be arranged for you. A small tube is also placed through the skin into the wound to drain any blood from it. This 'drain' is usually removed a few days after your operation.

Q. Will I have a scar?

All cuts made through the skin leave a scar, but the majority of these fade with time. The scar on the outside of your leg will run from just below the knee joint to just above the ankle joint.

Q. What are the possible problems?

There are potential problems with any operation. Fortunately, with this type of operation, problems are rare. However, it is important that you are aware of them and have the opportunity to discuss them with your surgeon. The following problems might happen:

- Bleeding – bleeding is unusual because a 'drain' is typically inserted into the wound.
- Infection – infection is not normally a problem because you will be given antibiotics through a vein. This is while you are asleep and for the first few days after your operation.
- Numbness – sometimes you may notice a small patch of skin on the lower part of your leg or foot that is numb or tingly after the operation. This numbness may take several months to disappear but in a very small number of patients, it may last for ever.
- Flap failure – in 2 - 5% of cases a blood clot can develop in one of the blood vessels either supplying or draining the flap. If it is in the blood vessel supplying blood to the flap, the flap will not get any fresh blood. If a clot develops in the vein draining the flap, then the flap becomes very clogged-up with old blood. It is a problem that usually happens within the first two days after your operation. It means that you will have to return to the operating theatre to have the clot removed. Removing the clot is not always successful and on these occasions the flap 'fails' and a different method of reconstruction is made.

Q. Will my walking be affected?

In the long term, removing the fibular bone should not lead to problems in walking. You will have bed rest for a day or two after your operation. Hopefully, soon after this, you will be sitting out of bed in a chair. With the help of physiotherapists, you can start to walk within a few days after your operation and soon be able to manage stairs. Very occasionally you may need help (a stick) for a few weeks or so.

What are the alternatives to this treatment?

There are no surgical alternatives to this treatment.

For more information:

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Document history

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