

Major bone grafting (using bone from outside the mouth) and dental implants

This leaflet aims to answer your questions about having a major bone graft and dental implants. It explains the benefits, risks and alternatives, as well as what you can expect when you come to hospital.

If you have any further questions, please speak to a dentist or dental nurse caring for you.

What is a dental implant and bone graft?

Dental implants are artificial replacements for your tooth roots that are placed within the bone of your jaw so that they can be used to support dentures, crowns (caps) or bridges.

In some patients there is not enough bone in their jaw to allow dental implants to be inserted. In cases where a lot of bone is needed, it may be possible to rebuild the jaw using bone taken from another part of your body, usually your hip. This is called a major bone graft.

What happens during bone grafting?

Patients needing a major bone graft will have a short stay in hospital. The procedure is done while you are asleep (using a general anaesthetic). You should be given a copy of our leaflet, **Having an anaesthetic**. If you do not have a copy, please ask.

- The gum is lifted away from the underlying bone where the graft is to be placed and the amount of bone needed is assessed.
- The bone graft is then taken from your hip, carefully removing the bone in blocks.
- The wound on your hip is then closed with stitches.
- A cannula (small tube) is usually inserted into the wound in your hip so that you can receive pain relief medication.
- Occasionally a small drainage tube may be placed during surgery to drain any blood that collects in your hip wound after surgery.
- Once the hip bone has been removed, the bone will be transferred to the necessary sites and then fixed with screws.
- This will involve lifting the gum and preparing the area for the graft.
- Once the graft has been placed the wound will then be stitched back together.

Once the graft has been confirmed as successful, and the site of the bone graft is totally healed, the next stage of the dental implant process can begin. See our information sheet on dental implants for more information on this stage of your treatment.

What are the benefits – why should I have a bone graft and dental implants?

Dental implants can be very useful when:

- we would otherwise have to crown (cap) healthy teeth
- a denture or bridge would be difficult or sometimes impossible because there are no suitable teeth or gums for support.

If there is not enough bone in your jaw, bone grafts may be needed to insert enough implants to support dentures, crowns (caps) or bridges.

Bone grafts may also be needed to improve the bone and gum at a proposed implant site so that it looks better. Rebuilding a site to its dimensions before tooth loss can be difficult and a compromise may have to be accepted.

What are the risks?

- Pain, swelling and bruising in the area where the graft (bone) has been taken from. If bone has been taken from the hip, you may find it uncomfortable to walk for two to four weeks.
- Swelling in the jaw which normally lasts for about one to two weeks.
- Infection and/or failure of the graft. A risk of infection at the donor site (hip) also exists. We try to avoid this by using careful techniques and antibiotics.
- Insufficient successful graft bone to accept implants. In these cases further grafting may be necessary.
- The risk of failure is higher in certain individuals, particularly those who smoke. You will be advised if we think risk of failure is higher than normal in your case.
- There is a higher risk of failure in implants placed into grafted bone rather than natural bone.

Are there any other alternatives?

Synthetic bone substitutes, or bone from animals or other humans, are available but do not perform as well as your natural bone. This is because it is less likely that your body will reject your own bone.

On some occasions your bone graft may also be mixed with a synthetic material or bone from another source i.e animal derived products. In some cases a synthetic membrane may also be used to cover and protect the graft. We will inform you of any proposed synthetic graft or membrane, the composition of the graft/membrane and the origin of the graft/membrane (make/type). The choice of material can be discussed

How can I prepare?

Please make sure you have told us about any problems with your health and about any tablets or medicines you are taking. Some medical conditions change the advice and information we need to give you.

If you are a smoker we strongly advise you to quit and remain a non-smoker in the long term. This will significantly reduce the risk of some implant complications. For help giving up smoking, please speak to your nurse, or call the Trust stop smoking service on **020 7188 0995**, or call the NHS Smoking Helpline on **0800 169 0 169**

Giving my consent (permission)

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.

Will I feel any pain?

The level of discomfort in your mouth and hip is variable and generally only needs painkillers. These will be given to you during your hospital stay and when you leave hospital. It is possible that some facial swelling and bruising may occur.

What happens after the procedure?

You will be given a course of antibiotics to take home and use over the following week. In most cases, the graft will be left to heal for a period of three to six months before surgery is carried out to insert the dental implants.

What do I need to do after I go home?

You should be able to return to work about a week after your treatment. This is mainly due to the discomfort you will have in your hip, along with some difficulty in walking. There should not be a major impact on your ability to move around – we encourage you to move as soon as possible after the operation and will provide pain relief to make this easier.

You should avoid any strenuous activities, sport or exercise for three to four weeks after your operation.

It is essential that you look after the wound on your hip. We will give you instructions and dressings so that you can look after the wound at home. Your stitches will be removed and your wound will be checked about a week to ten days after your procedure.

Please do not brush the area where your graft was inserted for the first week after surgery. Use a mouthwash containing chlorhexidine (for example, Corsodyl) to keep the area free of plaque. The mouthwash should be held in the mouth for one minute and this should be repeated twice daily. Please read and follow the instructions on the label.

Occasionally you may not be able to wear your dentures for up to two weeks after the surgery to allow the wound in your mouth to heal (the doctor or nurse treating you will let you know if this is the case). For the same reason, it is also a good idea to stick to a soft diet after your operation.

You should avoid alcohol for 48 hours after the operation and while you are taking antibiotics. **If you are a smoker we strongly advise you to quit and remain a non-smoker in the long term.**

What should I do if I have a problem at home?

If you experience any bleeding in your mouth, roll up a clean handkerchief, press it over the wound and hold it there by firm finger pressure for at least half an hour.

Important: If the bleeding does not stop, go to your local accident and emergency department (A&E).

Contact the Dental Implant department as soon as possible on the number below if you have any pain in your stomach or swelling in your hip, or have a fever and feel unwell. **Contact your local A&E department if it is outside our normal working hours.**

Will I have a follow-up appointment?

You will need to be seen a week after your operation to check your hip and mouth. The stitches in your hip will be removed after around 10 days.

You will need a further follow up appointment to check that the bone graft has worked and to plan the next stage of your implant treatment. These appointments will either be given to you before you leave hospital or sent to you in the post.

Any dental restorations or dentures based on implants will need regular follow up and occasional maintenance. We will expect you to be willing to attend for such care, and for regular checks of the implants themselves.

Contact us

If you have any questions or concerns please contact the **dental implant department** on **020 7188 1816** 9am to 5pm Monday to Friday, or email the department at **dentalimplants@gstt.nhs.uk**

Out of hours, please contact your local accident and emergency (A&E) department.

Pharmacy Medicines Helpline

For information about any medicines that you have been prescribed at Guy's and St Thomas' hospitals, you can speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

e: 020 7188 8801 at St Thomas' t: 020 7188 8803 at Guy's e: pals@gstt.nhs.uk

Language and Accessible Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

t: 020 7188 8815 fax: 020 7188 5953

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

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