

What you need to know about *dental implants*

What is a dental implant?

Dental implants are fixed tooth replacements generally made from titanium, zirconium or a combination of both materials.

Dental implants bond to your bone after placement and can be used to support a crown (replacing a single tooth), a bridge (often requiring 2-3 implants to replace multiple teeth) or two to six implants to lock into a removable plate or to support a full arch bridge.

The type, position and number of implants needed is dictated by your requirements and suitability for implants.

For more information about dental implants, visit the EFP (European Federation of Periodontology) website.

<https://www.efp.org/for-patients/dental-implants/dental-implants-explained/>

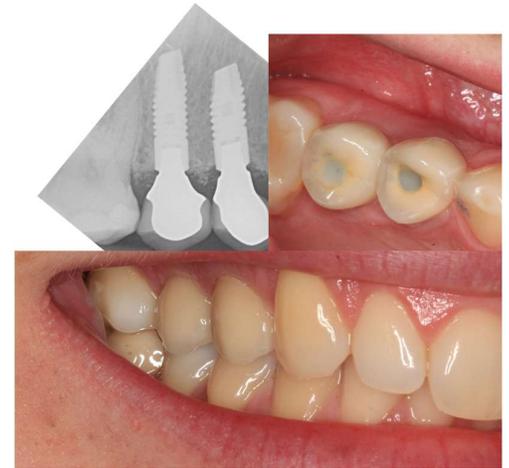


Figure 1. dental implants replacing premolars

What if I need grafting?



Areas where a tooth or teeth need to be replaced have often sustained damage caused by infection or trauma.

Damage usually results in loss of bone and/ or soft tissue requiring replacement with a graft.

Grafting can be in the form of **soft tissue (gum)** or **hard tissue (bone)**.

Soft tissue grafting involves using a small piece of your own tissue or a collagen matrix (FibroGide® produced by Geistlich Pharma®) and transplanting the graft or matrix to the site where it is required.

Hard tissue grafts are usually in the form of a xenograft which comes in a single-use, sterile package. The grafting material that will be used in your procedure is called BioOss® (Geistlich Pharma Australia) and is bovine in origin (sourced from cows farmed in Victoria).

A dissolvable collagen membrane may be used to contain the bone graft which is also developed from cows (MemLok® by BioHorizons or Osteogenics Cytoplast™ RTM).

Synthetic bone graft options are available but are generally not as effective.

Does it matter if I smoke or vape?

Smoking and vaping cessation is critical for good healing after dental implant procedures and procedures involving grafting. I recommend **smoking and vaping cessation for at least six weeks prior to and after surgery**. Quitting is always preferable to achieve the best short and long-term outcomes for your implant.

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Figure 3. replacing an upper canine tooth

What are the major risks involved?

Risk to adjacent structures

Adjacent structures such as teeth, nerves, lymphatics and blood vessels can be damaged when placing a dental implant if they lie close to or within the planned implant site. This can adversely affect sensation and function, potentially permanently. A thorough preoperative examination and three-dimensional imaging of the proposed implant site is therefore completed for you to minimise the risk of damage to adjacent structures. Furthermore, procedural risks applying to your individual situation will be discussed with you at the time of your consultation. If you have any queries regarding your implant treatment, please feel free to email Dr Melinda Newnham for further clarification.

Implant failure

Currently dental implants have a high success rate but there remains a small chance of failure. The risk of implant failure is higher in smokers and smoking cessation is recommended. Furthermore, some conditions such as diabetes and osteoporosis may affect implant success. Each case needs to be assessed individually.

Gum disease around implants

Implants can be affected by gum disease (called peri-implantitis) just like teeth. Effective, twice-daily cleaning at home together with regular recall visits to your dental team are necessary to minimise your risk of gum disease around your implant.

Further information

For more information regarding dental implants and the biomaterials used in your upcoming procedure, visit the following websites:

<https://www.straumann.com/au/en/patients.html>

<https://www.geistlich.com/dental-patients/what-are-biomaterials>