

Maxillofacial Prosthetics

Information for patients from the Maxillofacial Prosthetists

You may have been told that a facial prosthesis will be made for you after your surgery. Depending on what surgery you are having, the following information aims to give you an understanding of the types of prostheses available.

If after reading this you have any further questions or need more information, please speak to one of the maxillofacial prosthetists (contact details are on the back page of this leaflet).

What is a prosthesis?

Prostheses are artificial appliances designed to restore a missing part of your body, that cannot be reconstructed or repaired surgically. Maxillofacial prostheses replace anatomy inside the mouth (intra-oral), or a part of the face such as the eye, ear, nose, or cheek (known as extra-oral prostheses).

These removable prostheses are usually put on and taken off daily, much like a pair of dentures.

What can a prosthesis replace?

There are many types of prosthesis available, depending on which surgery you have had.

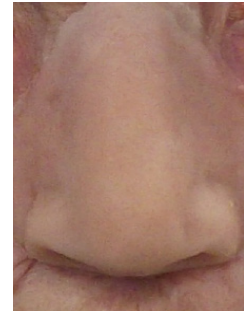
- **Intra-oral prostheses** include replacing teeth and the palate (roof of your mouth) and are used to help you with eating, swallowing, and speech.
- **External facial prostheses** are used to replace missing facial features such as your nose, ear, or eye and lids. These types of prostheses are also helpful in restoring your confidence after treatment for an illness that results in a major facial difference.



- **Nose**

Some surgery involves removal of all or part of the nose. A nasal prosthesis provides replacement for the structure and aesthetics to the face.

This type of prostheses is provided when surgical reconstruction is not possible. A very realistic looking prosthetic nose can be made out of silicone and is sculpted and colour matched to your surrounding skin. Photographs taken before surgery can help with this process.



A prosthetic nose

Nasal prostheses help humidify (balance the change of temperatures) of your nasal cavity during breathing and, like a real nose, protect the delicate sensitive mucosal tissue that lies below. A nasal prosthesis is removable and can be attached using an adhesive, bone anchored implants, or spectacles (see below for more details).

- **Eye**



Prosthetic eyes

A prosthetic eye, known as an 'ocular prosthesis' or 'indwelling eye', is provided following the loss of an eyeball. These prostheses are made of a hard material called acrylic and are custom made to fit into an individual's eye socket or as a thin shell over an unseeing cloudy eye. The prosthetic eye is coloured to match your other eye.

If your eye and surrounding lids and skin are missing, a larger prosthesis called an 'orbital prosthesis' can be made for you. This type of prosthesis includes a prosthetic eye, and also the eyelids and surrounding anatomy.

Although these prostheses do not move or blink, they are realistic and can include eyelashes and eyebrows. This type of prosthesis can be attached using a variety of different methods, which will be discussed with you before treatment is decided.



An orbital prosthesis

- **Ear**

Removal of cancer can lead to the loss of part or a whole ear. Ear prostheses made from silicone are secure and can be very realistic. They help to keep glasses on and help your hearing by duplicating the lost anatomy of the external ear.

These can be attached using adhesive or bone anchored implants.



Attached using bone anchored implants



Ear prosthesis

How are prostheses made and fitted?

Prostheses are custom made for each person. Making a prosthesis needs the specialist skills of a maxillofacial prosthetist.

For most facial prostheses your prosthetist will see you for a consultation assessment. This is when they will discuss and produce your prosthetic treatment plan. The plan considers your individual needs, goals, and circumstances and considers all discussions between you and your surgeon. This appointment is also a great opportunity for your prosthetist to tell you about the prosthetic treatment pathway and answer any questions that you or your family may have.

It is important that your prosthesis is made at the right time for it to fit comfortably. The area must have healed well and all swelling of soft tissue must be reduced. Your prosthesis is made with you over a series of appointments. They may involve having impressions taken of the area, sculpting, fitting, and colour matching. The number of appointments and length of time taken for your prosthesis to be made will depend on the area being replaced. Areas of high detail and other complicating factors may make the process longer.

Prostheses are made out of biocompatible (not harmful or toxic to living tissue) materials that mimic the tissue that has been lost.

- **Extra-oral facial prostheses** are commonly made out of medical grade silicone because of the materials durability, life-like feel, and ability to be coloured realistically.
- **Prosthetic eyes and teeth** are often made with acrylic, a type of plastic that can be coloured and polished.
- **Other intra-oral and cranial prostheses** need the use of strong materials such as titanium, or PEEK (a semi-crystalline thermo plastic) so they are strong and will last.

What are the advantages and disadvantages of a facial prosthesis?

As with any procedure there are advantages and disadvantages to consider when deciding if a prosthesis is right for you.

Advantages

- After major head and neck surgery a prosthesis can help a patient's rehabilitation and improve their quality of life.
- They offer protection and support to affected areas.
- Prostheses are important tools for social and physical rehabilitation following cancer surgery.
- They can be very subtle, and in certain facial functional situations, can provide a better aesthetic result than surgical reconstructive options.
- Prostheses do not need more surgery unless the prosthesis is implanted or attached via bone anchored implants.
- They offer protection for delicate tissues.

Disadvantages

- A prosthesis is not living tissue, it does not blink or move or have feeling like a real body part.
- A prosthesis may not be a permanent attachment and usually will need to be removed daily for cleaning.
- Prostheses will wear out over time, as details and colour is lost. These will need maintenance and replacing from time to time; annual reviews are arranged so that this work can be undertaken. For more information please read; How long will my prosthesis last? on page 4.

How is my prosthesis attached?

Most facial prostheses can be removed and are attached to the body using a variety of different methods. Your surgeon and maxillofacial prosthetist will decide the most suitable attachment type for you based on your medical history, skin and bone characteristics, your dexterity (ability to hold and position the prosthesis), and/or the home support you have available.

Facial prostheses may be attached using medical adhesive or via bone anchored implants and even by additional fixation to spectacles, should this be needed.

What are bone anchored implants?

Bone anchored implants can be used for attaching both intra and extra-oral prostheses. This process involves titanium implants surgically placed into the bone (osseointegration, the fusing of implant to bone). This procedure is carried out under a general anesthetic (you are asleep for the procedure). This may be during your first surgery or at a later date.

Before surgery - the planning, positioning, and attaching bone anchored implants needs a multidiscipline approach; where surgeons, prosthetists, and supporting health care staff are involved. For this process your surgeon will arrange for you to attend for a series of medical scans to help with their planning.

After your implants have been surgically placed, there is a healing process, where your bone and surrounding facial tissue recovers before any further stages are undertaken by your prosthetist. A dressing cover is provided to make sure the area is kept clean and given every opportunity to heal safely.

After you have had time to heal, your prosthesis manufacture process begins with a series of appointments with the maxillofacial prosthetists. Your prosthesis will include magnets or clips resulting in a snap-on/snap-off type of prosthesis.

How long will my prosthesis last?

How long a prosthesis lasts will depend on the type of prosthesis used, the material it is made from, how it is attached, how it is cared for, and how often the prosthesis is worn. A general time frame is one to three years, with many lasting much longer.

The prosthesis you are provided with soon after surgery may have a shorter lifespan. Tissues continue to settle and change up to a year after surgery and this will affect the fit. A well cared for later prosthesis will fit well and last for much longer. However, silicone and our own skin pigmentation is affected by daylight and therefore regular checks for colour loss or tone change are important to make sure the prosthesis continues to look realistic/natural.

How long will I wait after surgery for my prosthesis?

To make sure your prosthesis fits well, it is important that the surrounding and fitting surface areas have had time to heal from all the surgical or radiation treatment you have had. Your surgical care team will advise you when the time is right.

What if I have any further questions or concerns about prosthetics?

If you have any questions or concerns about the process or your prosthesis, please contact one of the following prosthetists in the Maxillofacial Laboratory.

- **Mrs Rachel Jenner**
Head Maxillofacial Prosthetist, Medical Tattooist and Maxillofacial Laboratory Manager
- **Mr S James Abbott**
Deputy Maxillofacial Prosthetist
- **Maxillofacial Laboratory**
William Harvey Hospital, Ashford
Telephone: 01233 65 18 59

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If you would like this information in **another language, audio, Braille, Easy Read, or large print** please ask a member of staff. You can ask someone to contact us on your behalf.

Any complaints, comments, concerns, or compliments please speak to your doctor or nurse, or contact the Patient Advice and Liaison Service (PALS) on 01227 78 31 45, or email ekh-tr.pals@nhs.net

Patients should not bring in large sums of money or valuables into hospital. Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property had been handed in to Trust staff for safe-keeping.

Further patient leaflets are available via the East Kent Hospitals web site www.ekhufft.nhs.uk/patientinformation