



What is a facial prosthesis and how does it work?

...continued from newsletter

A facial prosthesis is an artificial device used to replace a missing or malformed facial feature. A facial prosthesis can be made to replace an absent ear, nose, or eye with lids. A person in need of a prosthesis may have lost a part of their face due to cancer, trauma, or as a result of a congenital birth anomaly. Facial prosthetics offers an alternative to rehabilitation when surgical reconstruction cannot be achieved, or is preferred by the patient. The prostheses are created by an Anaplastologist who is part of a craniofacial rehabilitation team. The Anaplastologist has special training in art, anatomy and dental technology. Facial prostheses offer various advantages and disadvantages compared to surgical rehabilitation that should be discussed with the craniofacial team.

A facial prosthesis can be easily thought of in the same way as movie make-up that is used to enhance or change the appearance of a movie star. A facial prosthesis is first sculpted and then molded to custom fit the individual's tissue site. Anatomical landmarks, facial proportion, and symmetry are all taken into account to create a convincing, life-like facial feature. Facial prostheses are most commonly cast out of a silicone rubber that can be tinted to match the pigmentation of the individual.

Although a facial prosthesis can often achieve a very realistic look there are limitations to its use. Facial prostheses are made to fool the casual observer in everyday social encounters such as walking down the street, riding the bus, or shopping at the grocery market. A facial prosthesis can often help to ease the anxiety associated with a casual social encounter, but may be detectable under close observation. The practice of making facial prosthetics incorporates as much art as science. Therefore the esthetic results are dependent on the skills of the Anaplastologist. A facial prosthesis degrades over time and loses some of its esthetic value. This is caused by several factors, such as pollution and ultraviolet lights, which slowly makes it more yellow in colour. Typically, a facial prosthesis needs to be remade every two years.

A facial prosthesis is most commonly secured in place by one of two methods. The first method requires the individual to apply a medical grade adhesive to the back of the prosthesis to hold it in place. This is the same method used to secure masks and camouflage make-up in the movies. The prosthesis has to be removed at night and cleaned, along with the underlying skin on a daily basis. Certain situations, such as high humidity, oily skin or profuse sweating can cause the prosthesis to come off at an inopportune moment. The possibility that this might happen can undermine the individual's confidence in the prosthesis. A more secure method for retaining a facial prosthesis is through the use of bone integrated implants. This process, known as osseointegration, usually requires two minor surgeries. The first surgery consists of implanting little titanium fixtures into the bone. The implants are left alone for a period of at least three months while the bone grows around them to hold them in place. The second surgery is utilized to extend the implants above the skin surface by using an intermediate titanium extension called an abutment. The abutments can then be used to hold a gold bar so that the prosthesis can be clipped into place. Magnets can also be used. Osseointegration greatly enhances the retention of a prosthesis and enables the Anaplastologist to achieve better esthetic results. The prosthesis still needs to be removed overnight and cleaned along with the skin on a daily basis. Unfortunately, not every individual in need of a facial prosthesis is a candidate for osseointegration. The treatment options should be discussed with an experienced craniofacial rehabilitation team.