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## CHOICE AND CARE OF A PROSTHETIC EYE

After eye removal, regardless of the type of eye removal procedure performed, the eye is generally replaced in a two step process. The first step involves placement of something (fat, donor tissue, plastic, corral, metal, or some combination thereof) to fill the eye socket and create a bulk to which the eye muscles can be attached to achieve normal-appearing movement. The tissues are closed over this implant, so that if the upper and lower eyelids are pulled apart, a shallow pocket can be seen covered with a moist, pink membrane that looks something like the inside of a lip.

A prosthetic eye, sometimes called a "glass eye" or a "fake eye" is generally not made of glass. Glass is too heavy, difficult to work with, and easily chipped or shattered if dropped. Most prosthetic eyes today are made of complex plastic polymers. Prosthetic eyes are never spheres, but instead resemble very large, thick contact lenses with a convex front surface and a concave back surface.

Prosthetic eyes may be purchased as prefabricated, stock eyes or custom made. Stock eyes, although about a tenth the price of customized prostheses, are sold as "one size fits all" which means they truly fit almost nobody. There are several reasons why a customized prosthesis is more desirable:

- A customized prosthesis is hand-painted to appear as a perfect match for the other eye. This includes resting pupil size, iris color, and the number and size of blood vessels apparent in the white part of the eye.
- The vertical height and shape of the prosthesis can determine the position of the upper eyelid. If this is not customized, the upper eyelid may appear too droopy or the eye too open and startled. While the horizontal size of the prosthesis is essential to fully cover the underlying pink membrane without overstretching the eyelids. Finally, the front-to-back thickness of the prosthesis should be kept to a minimum to decrease overall prosthetic weight which can lead to problems in the long run.
- The back surface of the prosthesis must perfectly mold to the contour of the pocket that was surgically created. A good hand-in-glove fit with high surface area contact is essential for maximum, natural appearing prosthesis movement. A prosthetic eye that does not move naturally with the other eye can be very arresting to an observer. Additionally, with a poorly fitting prosthesis tear fluid accumulates in spaces between the prosthesis and the pocket's surface, and bacteria will grow in this fluid causing a chronic infection, painful inflammation, and constant discharge.

To maximize the health of the eye socket and long-term prosthetic wear the following should be observed:

- Never remove the prosthesis yourself, especially if the eye socket is infected or inflamed.
- If the prosthesis is knocked out or dislodged, it must be washed with soap, fully rinsed, and put back in immediately in the correct orientation.
- Have the prosthesis inspected at least every 6 months by an ocularist (someone who specializes in making and caring for eye prosthetics) for pits, cracks, and the need for polishing.
- See an oculoplastic surgeon at once for a prosthesis that falls out easily or seems to be changing position, or if the socket is bleeding, has lots of green or yellow discharge, or is often tearing.
- See an ocularist or oculoplastic surgeon for changes in upper or lower eyelid position or for any discomfort.

Use only drops and oils that are recommended or prescribed by a professional.