

# ENUCLEATION AND EVISCERATION – LOSS OF AN EYE



## What are enucleation and evisceration?

*Enucleation* is the surgical removal of the entire eye.

*Evisceration* is the surgical removal of the contents of the eye, leaving the white part of the eye and the eye muscles intact.

## Why is enucleation or evisceration necessary?

Removal of an eye may be required following a severe injury, to control pain in a blind eye, to treat some intra-ocular tumors, to alleviate a severe infection inside the eye, or for cosmetic improvement of a disfigured eye.

## Why choose one procedure over another?

Enucleation is the procedure of choice if the eye is being removed to treat an intraocular tumor, or to try to reduce the risk of developing a severe autoimmune condition called *sympathetic ophthalmia* following trauma. In most other situations, either enucleation or evisceration can each achieve the desired objective. Your surgeon will help you to determine which surgery is most appropriate for your condition.

## How is the surgery performed?

Both surgeries are usually performed in the operating room under general anesthesia, although they can be completed safely using local anesthesia with sedation.

After enucleation or evisceration, most of the lost volume is replaced by an *implant* placed in the eye socket. The implant is usually a sphere made of silicone rubber, polyethylene, hydroxyapatite, or alumina, and is covered

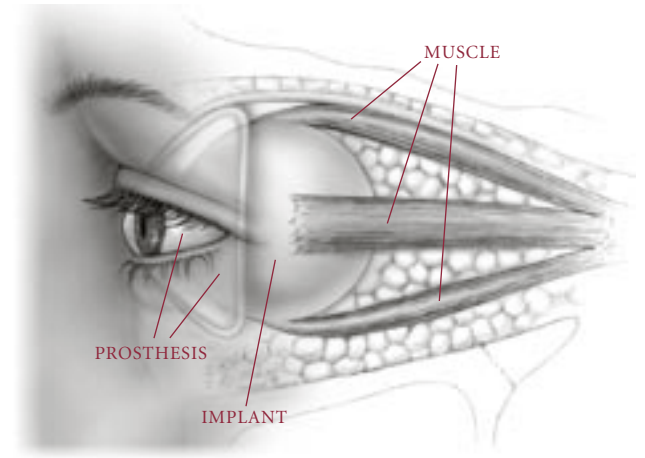
by the patient's own tissue. In most cases, the eye muscles are attached to the implant following enucleation, in order to preserve eye movement. Several weeks after surgery, an artificial eye, or *prosthesis*, is made by an ocularist. The front surface of the artificial eye is custom painted to match the patient's other eye. The back surface is custom molded to fit exactly in the eye socket for maximum comfort and movement. The prosthesis is easily removable, and may be removed as needed for cleaning. Most patients sleep with the prosthesis in place. A prosthesis lasts decades in many patients.

Some surgeons may offer the option of placement of a motility peg. This peg is inserted into the implanted sphere, usually several months after surgery. The front of the peg fits into a small concavity on the back surface of the prosthesis. This fixes the implant directly to the prosthesis to try to achieve better movement. This procedure is associated with potential complications, and should be discussed with your surgeon.

## What is the post-operative care?

Some patients spend the night at the hospital, while others go home the same day as surgery. You may be asked to take medications after surgery such as antibiotics, steroids, or pain-relievers. Patients may wear a patch after surgery for several days to several weeks, until they receive their prosthesis.

Continued follow-up is important as the tissues in the socket may atrophy (shrink) with time. This loss of volume may lead to eyelid laxity or socket changes that may affect the fit of the prosthesis. Careful monitoring of the socket and prosthesis by the surgeon and the ocularist will help keep the socket healthy, and will allow for early detection of any changes that may require further treatment.



## What are the risks and complications?

Short-term risks for this surgery, as with any surgery, include bleeding and infection. Longer-range complications include discharge and socket irritation or exposure of the implant. As with any medical procedure, there may be other inherent risks that should be discussed with your surgeon.

## Who performs the surgery?

Patients are most commonly treated by ophthalmic plastic and reconstructive surgeons who specialize in diseases and problems of the eyelids, tear drain, and orbit (the area around the eye).

You should look for a doctor who has completed an American Society of Ophthalmic Plastic and Reconstructive Surgery (ASOPRS) fellowship. This indicates your surgeon is not only a board certified ophthalmologist, but also has had extensive training in ophthalmic plastic surgery. When you are ready, you will be in experienced hands. Your surgery will be in an outpatient facility or at a hospital depending on your surgical needs.

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