



Basic Strategy of Eye Surgery and its Types

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Description

Eye surgery, commonly referred to as ophthalmic or ocular surgery, is an operation carried out by an ophthalmologist on the eye or its adnexa. Ophthalmology is synonymous with eye surgery. Because the eye is an extremely delicate organ, extra caution must be taken before, during, and after surgery to reduce or prevent additional injury. The right surgical treatment must be chosen for the patient, and the essential safety measures must be taken, according to an expert eye surgeon. Several ancient literature from as early as 1800 BC mention eye surgery, and cataract surgery first appeared in the fifth century BC. Today it continues to be a widely practiced type of surgery, with various techniques having been developed for treating eye problems.

Preparation and precautions

Anesthesia is necessary because the eye is abundantly supplied by nerves. Most frequently, local anaesthetic is used. For short treatments, lidocaine topical gel is frequently utilised as a form of topical anaesthetic. General anaesthesia is frequently utilised for children, traumatic eye injuries, major orbitotomies, and anxious patients because topical anaesthetic demands the patient's consent. The patient's circulatory condition is monitored by the doctor delivering anaesthesia, a nurse anaesthetist, or an anaesthetist assistant with experience in anaesthesia of the eye. To prepare the region for surgery and reduce the danger of infection, sterile precautions are followed. These precautions include the use of antiseptics, such as povidone-iodine, and sterile drapes, gowns, and gloves.

Laser eye surgery: Despite the fact that the phrases laser eye surgery and refractive surgery are sometimes used interchangeably, this is untrue. Lasers can be utilised to address problems that are not refractive (e.g. to seal a retinal tear). Myopia (short-sightedness), hypermetropia

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(long-sightedness), and astigmatism (uneven curvature of the surface of the eye) can all be treated by laser eye surgery, also known as laser corneal surgery. It's important to note that not everyone can have refractive surgery, and occasionally people discover that they still need eyewear following the procedure.

Cataract surgery: A cataract is an opacification or cloudiness of the eye's crystalline lens due to aging, disease, or trauma that typically prevents light from forming a clear image on the retina. If there is considerable vision loss, surgical lens removal may be necessary. The lost optical power is often replaced by a plastic intraocular lens.

Glaucoma surgery: A collection of conditions known as glaucoma that affect the optic nerve and cause visual loss are typically accompanied by elevated intraocular pressure. There are many different forms of glaucoma surgery, and variations or combinations of those types can help excess aqueous fluid leave the eye to lower intraocular pressure, and some lower it by reducing aqueous humour production.

Canaloplasty: An innovative nonpenetrating technique called canaloplasty is intended to improve drainage through the eye's natural drainage system and deliver long-lasting intraocular pressure reduction. Canaloplasty is a straightforward, minimally invasive surgery that makes use of microcatheter technology. An ophthalmologist makes a small incision to access the eye's canal in order to perform a canaloplasty. Viscoelastic, a sterile, gel-like substance, is injected through a microcatheter to enlarge the main drainage channel and its smaller collector channels while navigating the canal around the iris. A suture is then inserted into the canal and tightened after the catheter has been removed. Pressure inside the eye can be decreased by widening the canal.