Tuesday, March 06, 2012

Dr. Hussein Alhammami

Surgical & Laser Treatment

- **Peripheral Iridotomy, and Iridectomy**

  Pupillary block in angle-closure glaucoma is most satisfactorily overcome by forming a direct communication between the anterior and posterior chambers that removes the pressure difference between them. Laser peripheral iridotomy is best done with the neodymium:YAG laser. Surgical peripheral iridectomy is performed if YAG laser iridotomy is ineffective. YAG laser iridotomy is preventive when used in patients with narrow angles before closure attacks occur.

![Image of eye](image)

- **Laser Trabeculoplasty**

  Application of laser (usually argon) burns via a goniolens to the trabecular meshwork facilitates aqueous outflow. The technique is applicable to many forms of open-angle glaucoma, and the results are variable depending on the underlying cause. The pressure reduction usually allows decrease of medical therapy.
and postponement of glaucoma surgery. Treatments can be repeated. The outcome of subsequent glaucoma drainage surgery may be adversely affected.

**Glaucoma Drainage Surgery**

**Trabeculectomy**

is the procedure most commonly used to bypass the normal drainage channels, allowing direct access from the anterior chamber to the subconjunctival space forming filtering bleb.
The major complication is fibrosis in the episcleral tissues, leading to closure of the new drainage pathway. This is most likely to occur in young patients, in blacks, in patients with glaucoma secondary to uveitis, and in those who have previously undergone glaucoma drainage surgery or other surgery involving the episcleral tissues. Perioperative or postoperative adjunctive treatment with antimetabolites such as 5-fluorouracil and mitomycin C reduces the risk of bleb failure and is associated with good intraocular pressure control.

Trabeculectomy markedly accelerates cataract formation.
Goniotomy and trabeculotomy are useful techniques in treating primary congenital glaucoma, in which there appears to be an obstruction to aqueous drainage in the internal portion of the trabecular meshwork.

Cyclodestructive Procedures

Failure of medical and surgical treatment in advanced glaucoma may lead to consideration of laser or surgical destruction of the ciliary body to control intraocular pressure.

Cryotherapy diathermy, thermal mode neodymium:YAG laser, or diode laser can all be used to destroy the ciliary body.

**Cyclophotocoagulation**
(Cyotherapy)

Treatment is usually applied externally through the sclera, but endoscopic laser application systems are available.

(Diod laser Cycloablation)