

# **Lasers in Ophthalmology**

**LASER** is short for **L**ight **A**mplified **S**timulated **E**mission of **R**adiations.

## **Types of Lasers used in Ophthalmology**

1. Argon Laser
2. Diode Laser
3. YAG Laser
4. Excimer Laser

## ***What do Lasers do?***

Laser rays have energy. When they hit the target, they transmit that energy to the target. Heat is also given out. The effects in the eye are a combination of the Laser and heat energy.

Some Lasers are used to create holes, e.g. YAG Laser Iridotomy in Glaucoma.

The Excimer Laser has cutting power, used in LASIK.

The Argon and Diode Lasers are used to create burns that treat Retinal tears and Diabetic Retinopathy (DMR).

## **Use of Laser in Ophthalmology**

Lasers have been used widely in treatment of eye diseases. Such as,

1. Eyelid growths, including lid cancers
2. Trichiasis (Misdirected eye lashes)
3. Open up or block Lacrimal Punctum
4. Pterygium (Conjunctival degeneration)
5. To alter corneal curvature and correct refractive errors as in PRK, LASIK etc.
6. Glaucoma (Increased eye pressure)
7. To open opacified posterior capsule, about 6 months after cataract surgery
8. In closing Retinal tears in treatment and prevention of Retinal Detachment.
9. In Diabetic Retinopathy
10. For treatment of tumours like Retinoblastoma.
11. For Laser assisted Cataract surgery