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### Selective Laser Trabeculoplasty

Q-switched, frequency doubled Nd:YAG laser (532nm)

3 nanoseconds pulse (fixed)

400 micron spot size (fixed)

**Selective** pigmented trabecular cells without collateral damage.

# Selective Laser Trabeculoplasty







# Selective Laser Trabeculoplasty





## Selective Laser Trabeculoplasty

- Advantages of SLT
  - Natural
  - Selective
  - Non thermal
  - Repeatable

### Selective Laser Trabeculoplasty

 Cataract surgery statistically increases n medication and IOP in glaucoma patients with functioning blebs and controlled IOP

Crichton & Kirker, J of Glaucoma Feb 2001

### Selective Laser Trabeculoplasty

- Glaucoma surgery presents a challenge following cataract & IOL
  - Conjunctiva
  - Cornea
  - Postop shallow AC
  - Iris

SLT maybe ??

### Selective Laser Trabeculoplasty

- SLT is a useful tool in OAG in phakic patients
- Few reports on SLT in glaucoma patients with previous cataract surgery with PCIOL implantation

(Shazly et al.,2011)

### o AIM

 Assess SLT in lowering IOP in OAG patients with previous cataract & PCIOL

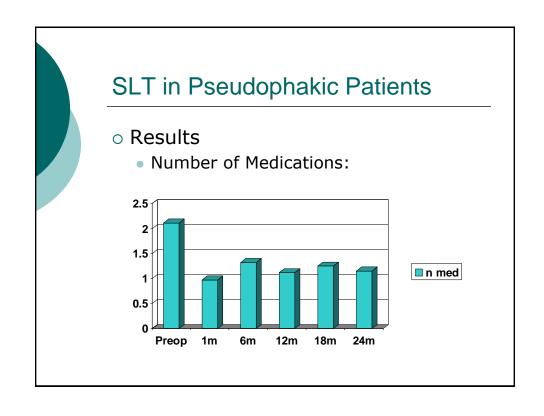
## SLT in Pseudophakic Patients

- Patients and Methods
  - Records of 36 patients
  - OAG on treatment
  - Uneventful phaco & PCIOL
  - 360° SLT
  - 9 patients previous SST

- Patients and Methods
  - Preop IOP and 1, 6, 12, 18 and 24m
  - Success: 20%, no further SST
  - Preop & postop # medication

#### SLT in Pseudophakic Patients Results **■ IOP** mean SD 63.3 11.08 Age 15 IOP preop 19.06 4.6 IOP 1m 13.53 3.4 10 IOP 6m 14.05 3.9 IOP 12m 15.47 4.1 IOP 18m 16.5 1.7 preop 1m 6m 12m 18m 24m IOP 24m 13.69 4.4 p<0.001

### SLT in Pseudophakic Patients Results • Success rate at 2 yr was 76.9% • Prior SST: **Mean IOP** 25 20 15 Preop 10 ■ Post op 5 **Prior** No SST **SST**



 Ophthalmic Surg Lasers Imaging. 2007 May-Jun;38(3):182-8.

Selective laser trabeculoplasty in phakic and pseudophakic eyes.

Werner M, Smith MF, Doyle JW.

Clinical Ophthalmology 2011:5 377–380

Effect of prior cataract surgery on the long term outcome of selective laser trabeculoplasty

Tarek A Shazly1,Mark A Latina2, John J Dagianis3, Satyakant Chitturi4

### SLT in Pseudophakic Patients

- Conclusion
  - SLT is a simple and safe outpatient procedure that lowers IOP and medications in pseudophakic patients with known OAG.
  - SLT was equally effective in patients with prior SST
  - SLT effect decreases with time

- Take home message
  - SLT is a useful tool in the control of IOP in pseudophakic patients
  - Previous SST should not defer the surgeon from trying SLT
  - Follow up is mandatory