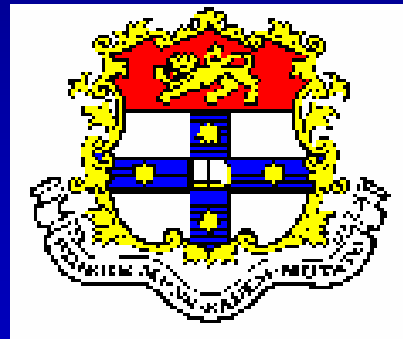


SLT – the future

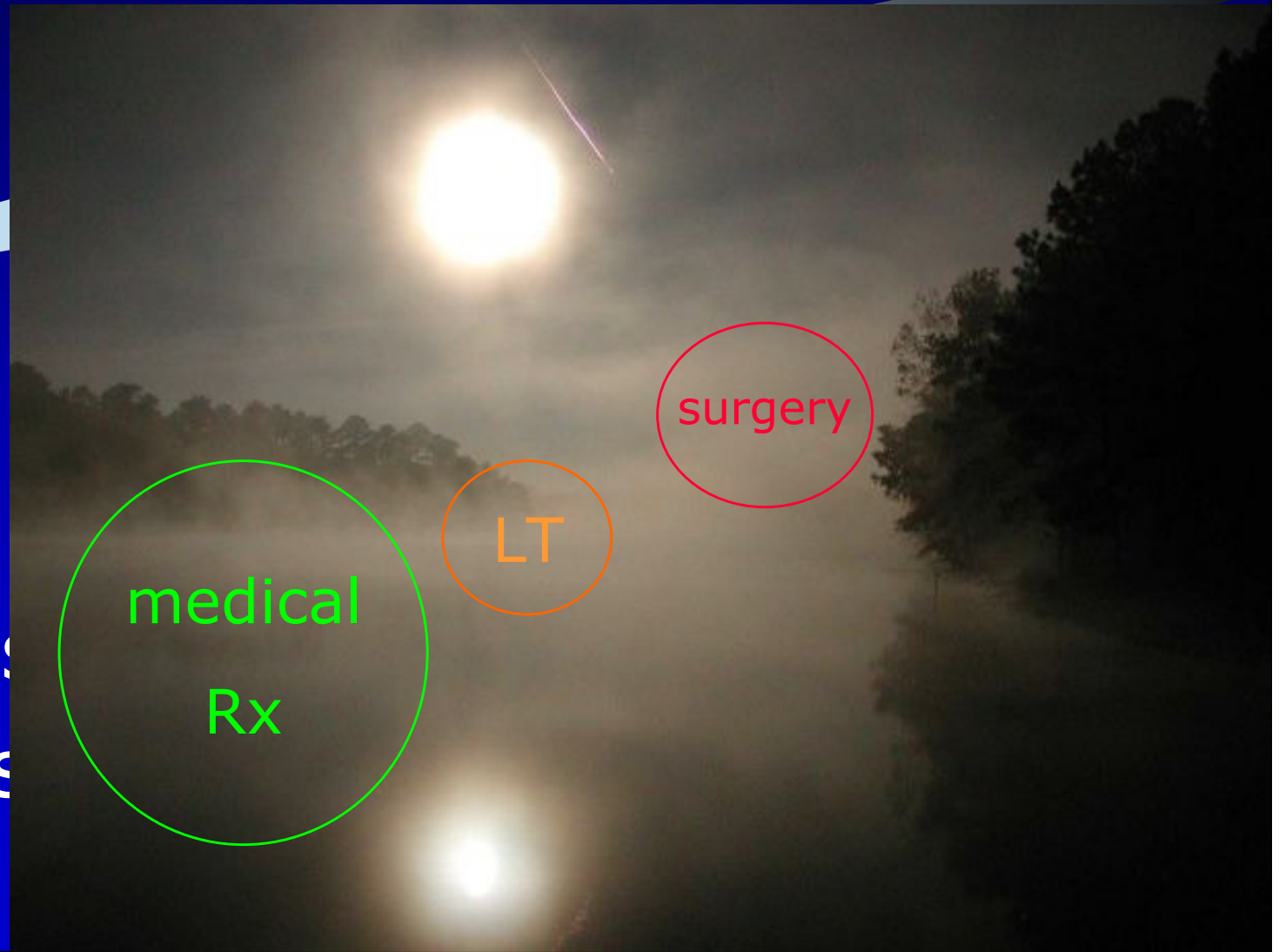


Ivan Goldberg
eye associates

glaucoma services, Sydney eye hospital
clinical assoc professor, univ of Sydney

SLT – the future

glaucoma s
clinical ass





conventional glaucoma Rx paradigm

1. Medical therapy

- monotherapy
- fixed combinations to simplify regimen
- “maximal tolerable medical therapy”

2. Laser trabeculoplasty

- Argon; Diode; Selective laser trabeculoplasty

3. Incisional surgery

- penetrating; non-penetrating; “canaloplasties”

conventional glaucoma Rx paradigm

1. Medical therapy

- monotherapy
- fixed

"primum non nocere"

= "first do no harm"

2.

argon laser trabeculoplasty; Selective laser trabeculoplasty

3. Incisional surgery

- penetrating; non-penetrating; "canaloplasties"

therapeutic index



benefit



harm

medical Rx – the problems

- quality of life – intrusion
- compliance / adherence
- persistence
- dyscompliance
- costs

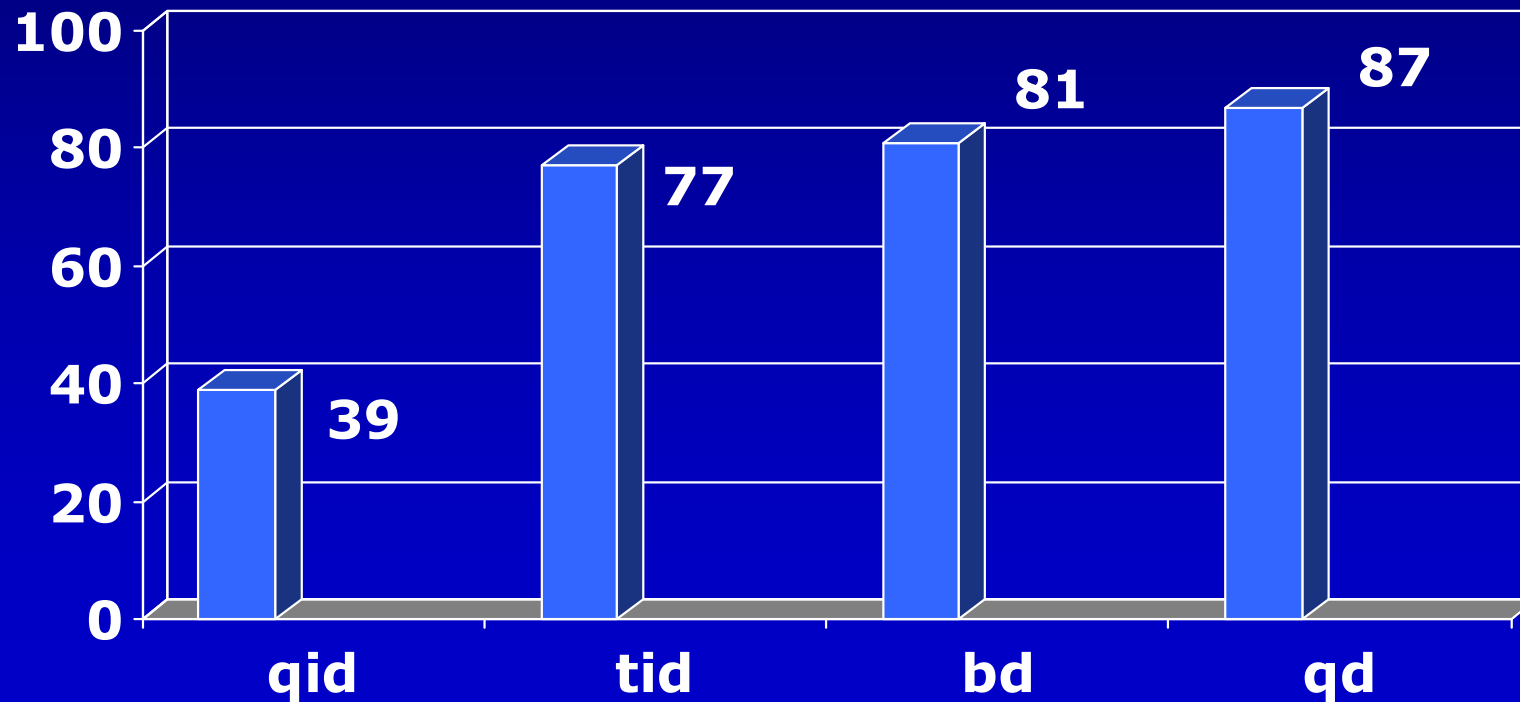


effectiveness

- side effects

non-compliance – frequency factors

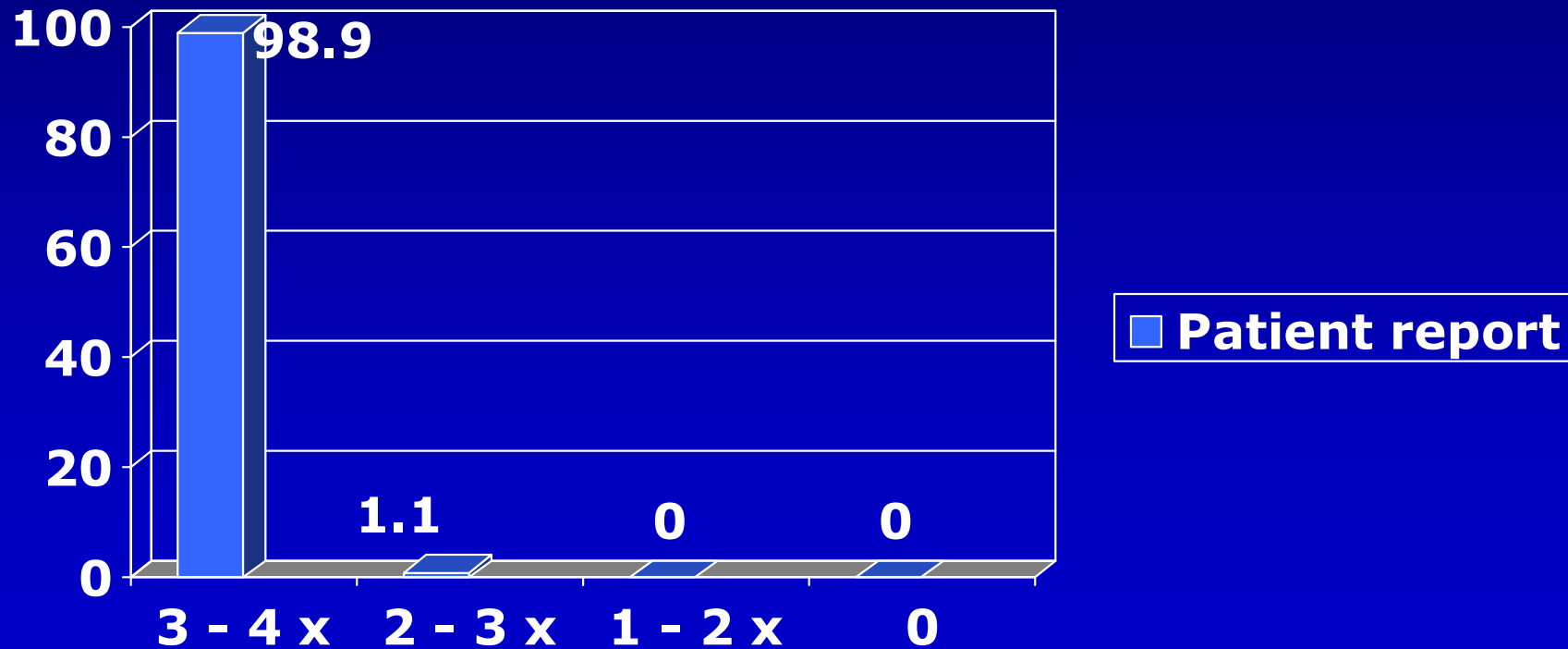
compliance rate (%) - epilepsy tablets



Cramer JA et al, J Am Med Assoc, 1989, 261:3273-7

compliance rates - measurements

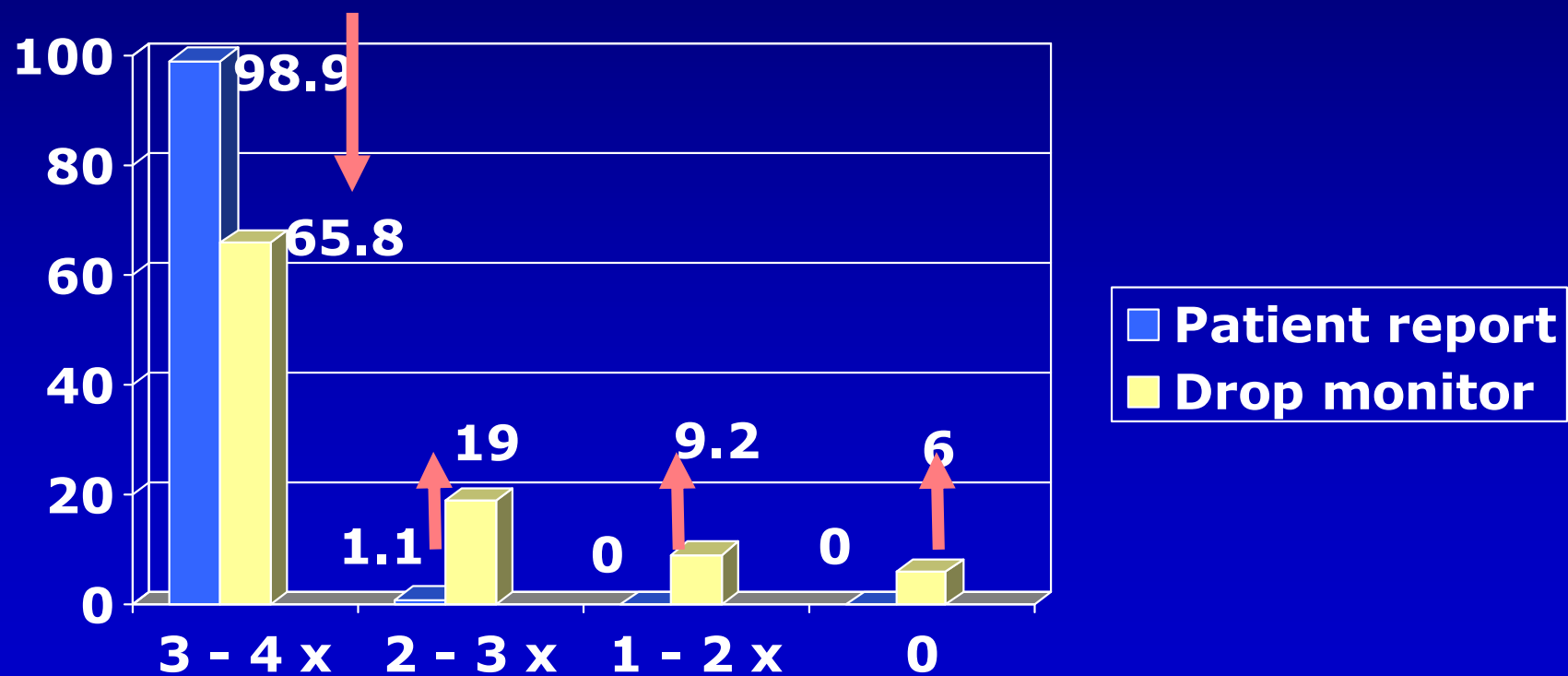
frequency of pilocarpine drop instillation (%)



Kass, Gordon, Morley, Meltzer, Goldberg. [Am J Ophthalmol](#) 1987;103:188-93.

compliance rates - measurements

frequency of pilocarpine drop instillation (%)



Kass, Gordon, Morley, Meltzer, Goldberg. Am J Ophthalmol 1987;103:188-93.

compliance - conclusions

- patients generally do **NOT** do what they are supposed to do
- patients will **NOT** tell you reliably that they are not doing what they are supposed to be doing (partly because they don't want to disappoint you, partly because "how can you expect me to remember what I have forgotten to do?")

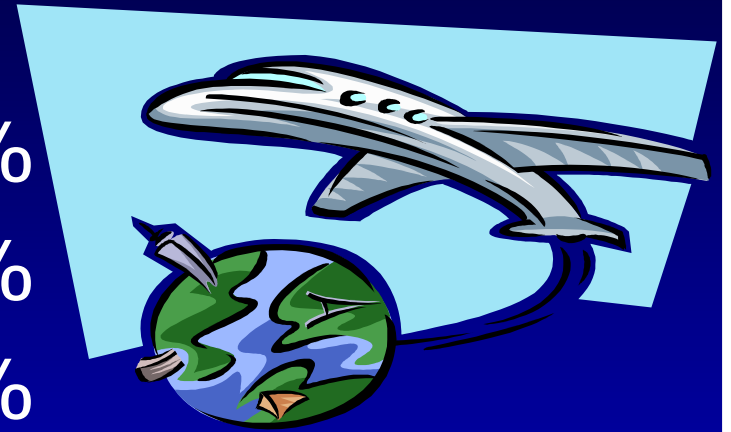
dyscompliance

- physical difficulties

- break seal
- open bottle
- tilt back head
- raise arm above shoulder height
- hold bottle steady
- express drop
- drop into sac
- avoid tip / eye contact
- avoid blinking
- NLD compression

instillation techniques

- tip – top 45%
- rammers 35%
- high-altitude bombers 15%
- head rollers 5%

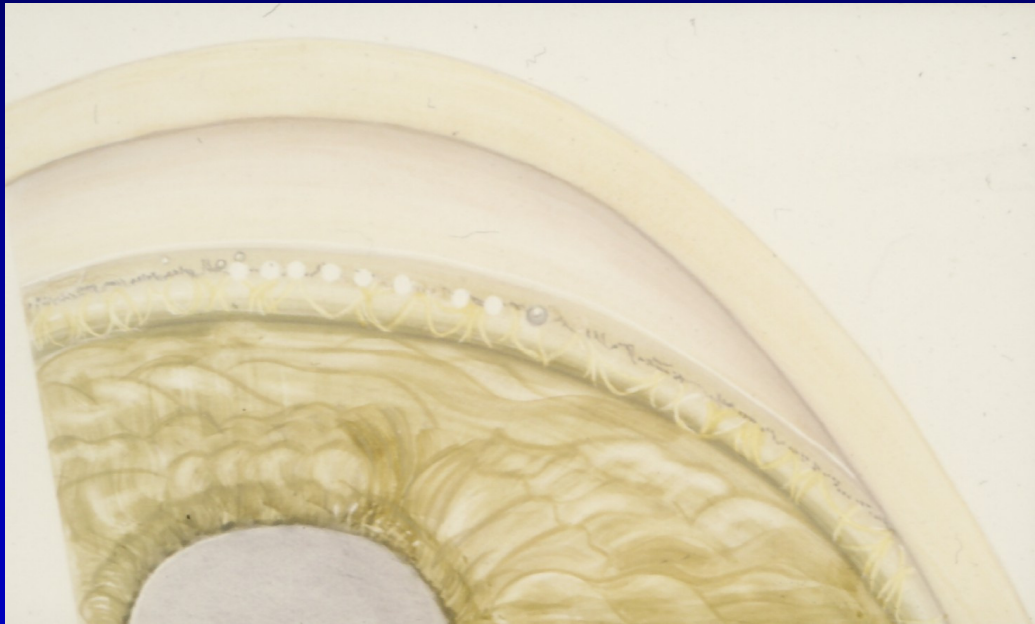


Kass MA et al – 148 patients observed

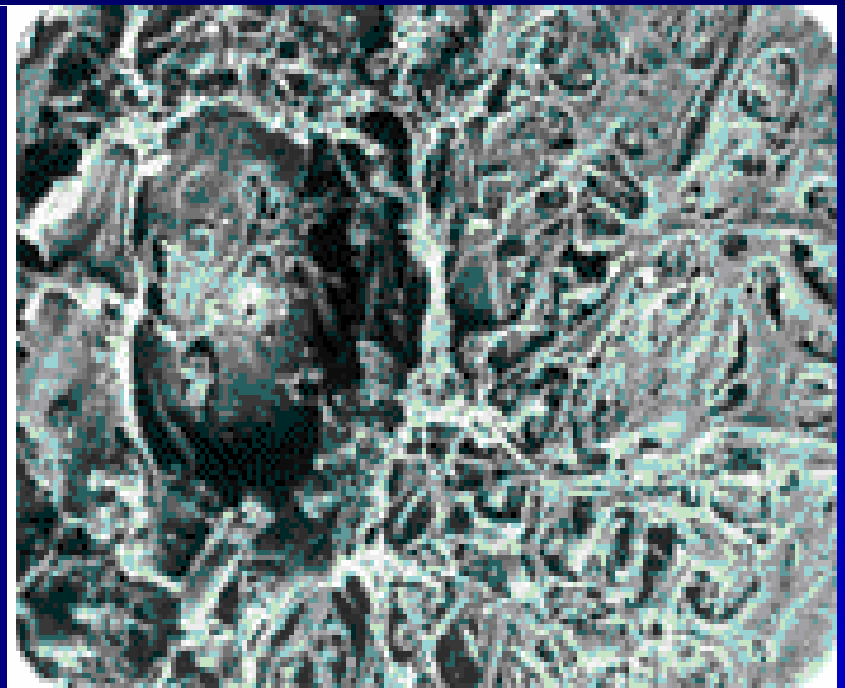
- 25% did not succeed
- 13% did not know they had failed
- 15% could not express a drop **AT ALL**

ALT

histology



Review of Ophthalmology, June 2003 p 69



Trabecular meshwork tissue after ALT



ALT – the problems

- limited efficacy on re-treatment
- potential for PAS => tissue damage
- contra-indicated in narrow angles / angle closure
- coagulative damage to TM
- post-treatment increase in IOP



surgical Rx – the problems

- failure to control IOP
- post-operative complications
 - short-term
 - long-term
 - cataract
 - endophthalmitis



what we know about SLT

- as effective as ALT / DLT
- as safe as ALT / DLT
- histologically safer than ALT / DLT
- titratable
- repeatable
- applicable to many eyes with angle closure



SLT

- broadens choices for clinicians / patients
 - timing during course of disease / management
 - range of treatable glaucomas
- can be considered over a wide range of management decisions

A diagram illustrating the relationship between management stages and medical interventions. A horizontal white line separates the top section (management stages) from the bottom section (medical interventions). Three callout boxes on the top are connected to three callout boxes on the bottom by lines that cross the white line. A light blue brushstroke is visible at the top left of the image.

early
management

later on in
management

after long-
term
management

medical Rx

accelerate
medical Rx

surgery

early
management

later on in
management

after long-
term
management

medical Rx
or / and
SLT

SLT add-on
and/or
accelerate
medical Rx
repeat SLT

SLT add-on
or repeat
SLT

consider your options

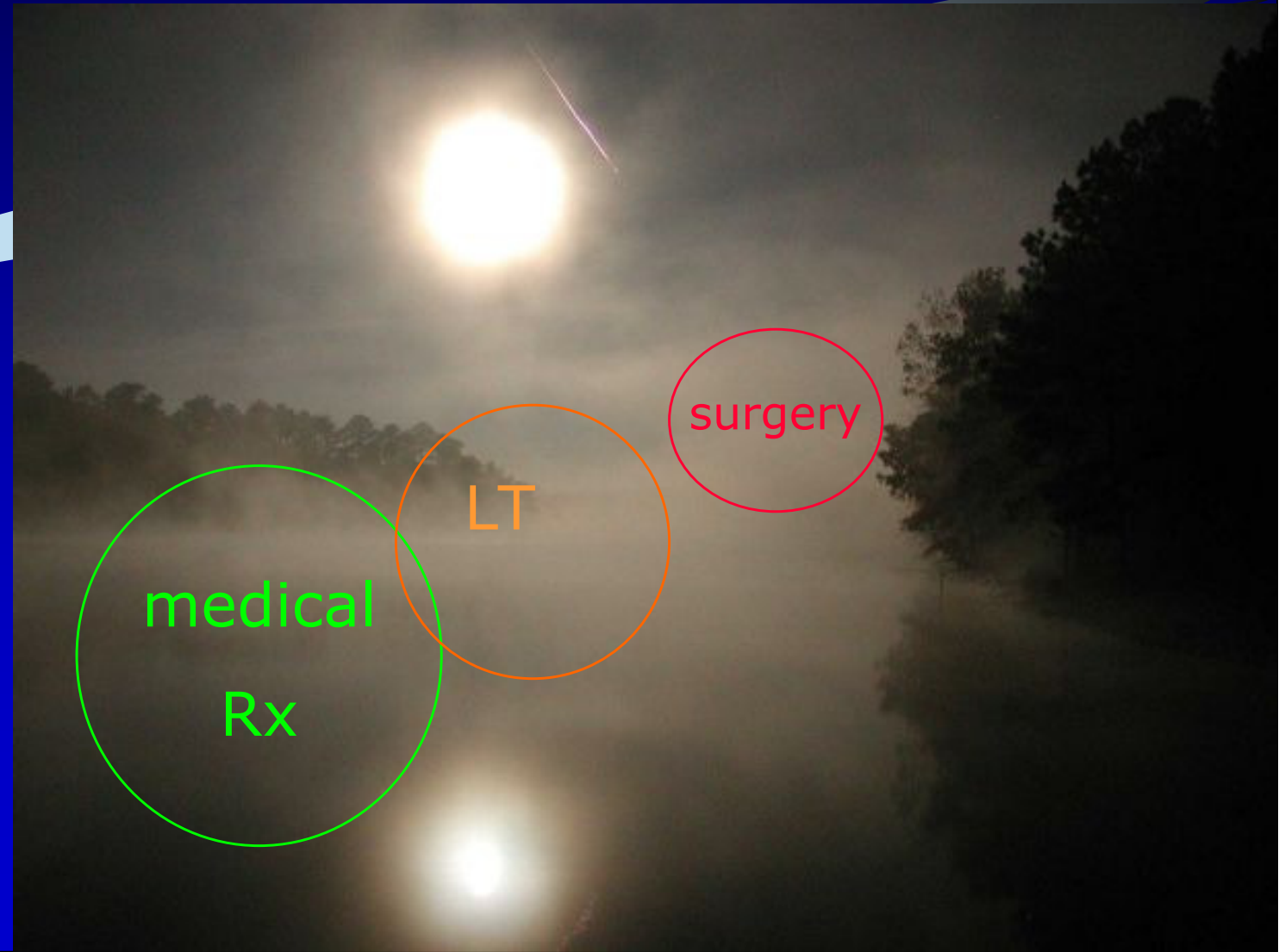
"primum non nocere"
= "first do no harm"



consider your options

- as replacement for ALT / DLT
- initiation of hypotensive therapy
 - SLT or medical treatment
- acceleration of treatment
 - SLT or more medical therapy
 - repeat SLT

SLT – the future



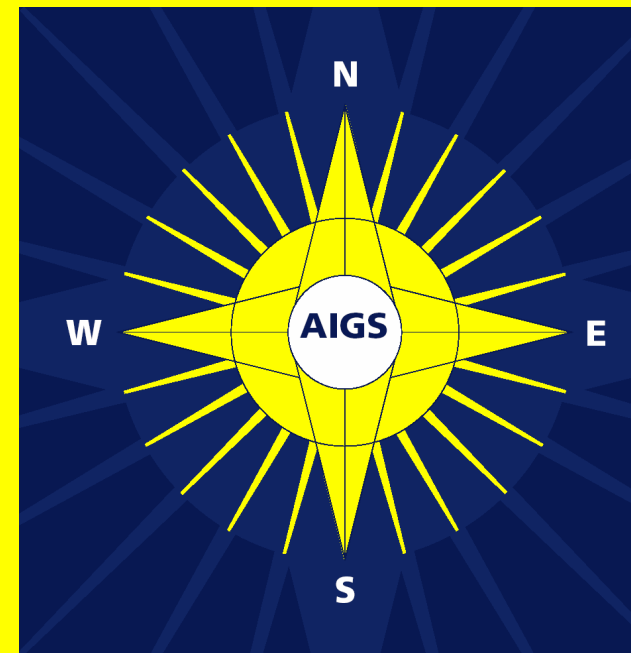
**Association of
International Glaucoma Societies**
THE GLOBAL GLAUCOMA NETWORK

**AIGS
WORLD GLAUCOMA CONGRESS**



www.GlobalAIGS.org

Singapore, July 18-21 2007



**FOR GLAUCOMA EXPERTS
AND
GENERAL OPHTHALMOLOGISTS**

**The AIGS is an independent,
impartial ethical, global
organization
for glaucoma science and care**