

5mm

READER'S NOTE

Sr. NO.	Time in minutes	Condition of conjunctiva	Size of pupil	Corneal reflex	Light Reflex
1	0	white	5	Present	Present
2	5	Pink	5	Present	Present
3	10	Pink	4	Present	Present
4	15	Pink	4	Present	Present
5	20	Pink	4	Present	Present

Pilocarpine 1.0% (parasympathomimetic)

Sr. NO.	Time in Minutes	Condition of conjunctiva	Size of pupil	Corneal Reflex	Light Reflex
1	0	white	6	Present	Present
2	5	white	7	Present	Present
3	10	white	8	Present	Present
4	15	white	8	Present	Present
5	20	white	9	Present	Present

Drug is Adrenaline 1:1000 (sympathomimetic)

Practical # 4

To study the effects of autonomic drugs on rabbit's eye

- (a) Pilocarpine
- (b) Atropine
- (c) Adrenaline
- (d) Timolol

Following parameters to be noted in normal eye after the instillation of eye drops

- I. Condition of conjunctiva
- II Size of pupil
- III Corneal reflex
- IV Light reflex

Adrenaline (conjunctiva almost same, size ↑, corneal reflex (no check) & light reflex (present) not absent

Observations in Tabulated Form

Sr. No.	Time in Minutes	Condition of Conjunctiva	Size of Pupil	Corneal Reflex	Light Reflex
1	0	white	5mm	Present	Present
2	5	white	7	Present	Absent
3	10	white	8	Present	Absent
4	15	white	8	Present	Absent

Conclusion:

Drug is Tropicamide 1.0% (parasympatholytic)

⇒ Pilocarpine causes eye to pink due to irritation.

READER'S NOTE

Pilocarpine	Anticholinergic Drugs	Adrenergic Drugs
Cholinergic drug	Atropine / Homatropine	Epinephrine
Miosis	Mydriasis	Mydriasis
Decrease IOP	Increases IOP	Decrease IOP
Cyclospasms (Fixation for near vision)	Cycloplegia Fixation for far vision Paralysis of accommodation	No effect on accommodation
Light Reflex Present	Light Reflex Absent	Light Reflex Present
USES: Rx of Glaucoma Break Adhesions Post synechial	Uses: For fundus exam Break adhesions bet iris and lens	Uses: Treatment of Glaucoma Eye surgery

READER'S NOTE

MATERIALS:

- Rabbit
- Rabbit Holder
- Torch
- Drugs
- Dropper
- Cotton wool
- Scissors
- Transparent ruler / scale

DRUGS:

- Tropicamide 1%
- Pilocarpine 1%
- Adrenaline 1:1000

PROCEDURE:

- Place a rabbit in a cage, keeping head outside.
- Trim eyelashes of rabbit before the experiment.
- Note & record normal size of pupil, presence of light reflex, corneal reflex and colour of conjunctiva.
- Then instill three drops of given drug into test eye of rabbit at one minute intervals.
- Note above parameters again at 5, 10, 15, 20, 25 & 30 minutes after applying drugs.
- Differences from control / normal are recorded and inference is drawn.

25 - 6 - 21
 47

READER'S NOTE

PRECAUTIONS:

- Take care while trimming eye lashes, so that the eye is not injured - This is done because lashes may interfere with corneal reflex.
- After using a drug sufficient time should be allowed before applying the next drug so the eye recovers from actions of previous drug.