


**OLOPAT-DS**  
Olopatadine 0.2%  
*Physician's sample  
Not for sale*  
  
Sterile Ophthalmic  
Solution

**Ocumox**  
(Moxifloxacin)  
**PHYSICIAN'S SAMPLE  
NOT FOR SALE**  
EYE DROPS  
  
STERILE OPHTHALMIC SOLUTION



**Blephamide<sup>®</sup>**  
**LIQUIFILM<sup>™</sup>**  
OPHTHALMIC  
SUSPENSION  
STERILE 5 ml

Corticosteroid



# LOTEFLAM

(Loteprednol Etabonate 0.5%)

**Physician's Sample  
Not For Sale**



Sterile Ophthalmic Suspension

فرائض:  
اسے صرف آنکھوں میں ہی لگانا ہے اور آنکھوں  
میں لگانی سے پہلے ہاتھوں کو دھونا چاہیے۔  
اس کے ساتھ ساتھ دوسرے دوائیوں کا استعمال  
بھی جاری رکھنا چاہیے۔  
اسے آنکھوں میں لگانے کے بعد  
آنکھوں کو بند رکھنا چاہیے۔  
اسے آنکھوں میں لگانے کے بعد  
کچھ دیر تک آنکھوں کو بند رکھنا  
چاہیے۔  
اسے آنکھوں میں لگانے کے بعد  
کچھ دیر تک آنکھوں کو بند رکھنا  
چاہیے۔

M.L. No. 000560  
D.R. No. 077114

Manufactured by:  
Vega Pharmaceuticals (Pvt.) Ltd.  
30 km. Multan Road, Lahore, Pakistan.

OPTIMUS



# ECONOPRED

Prednisolone Acetate 1%


**Physician's Sample  
Not For Sale**

~~Sterile Ophthalmic Suspension~~

3ml (approx)

Eye drops

NSAID



# VENAC

Nepafenac 0.1%

Sterile Ophthalmic Suspension

5 ml (Approx.)

فلورٹا عجب  
(فلورٹا تھرموپروفیلون)  
STERILE OPTHALMIC SUSPENSION

 ALLERGAN

**Blephamide<sup>®</sup>**

**LIQUIFILM<sup>™</sup>**

OPHTHALMIC  
SUSPENSION

STERILE 5 ml

Manufactured by:  
Remington Pharmaceutical Industries (Pvt.) Ltd.  
18 Km Multan Road, Lahore - Pakistan.



**Rocip**  
(Ciprofloxacin)

EYE DROPS



STERILE OPHTHALMIC  
SOLUTION

Manufactured by:  
REMINGTON PHARMACEUTICAL INDUSTRIES (PVT.) LTD.  
18 Km Multan Road, Lahore - Pakistan.

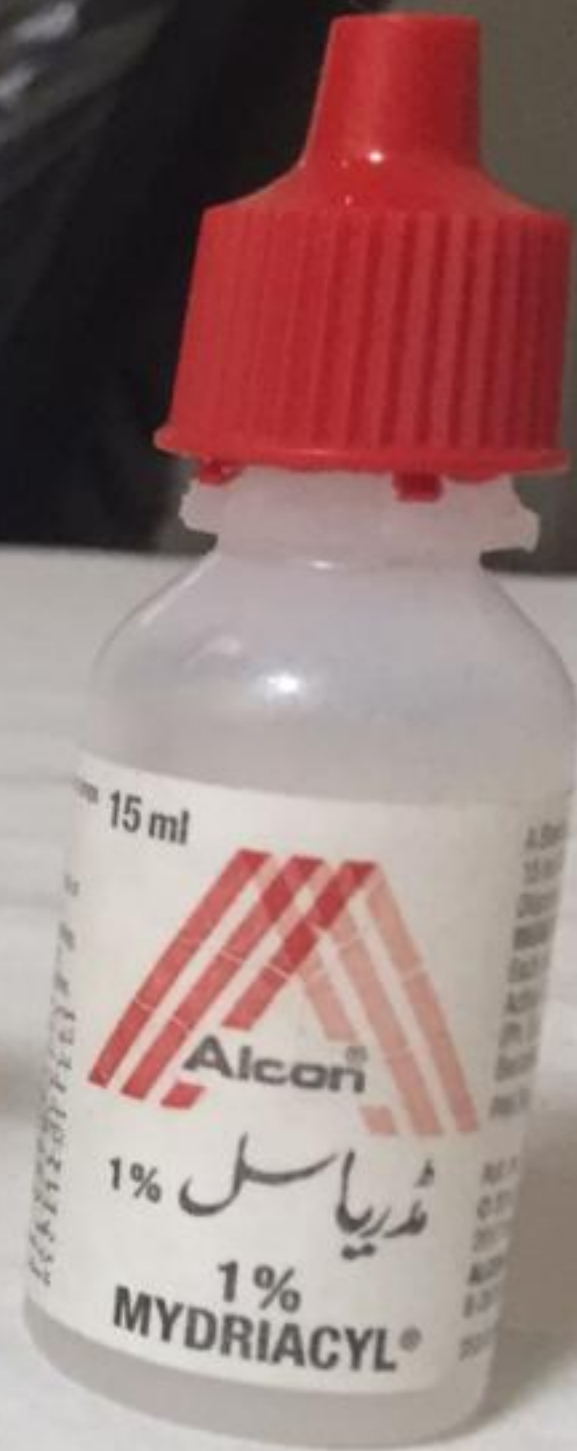


**Blotim 0.5%**  
**(Timolol)**  
Maleate  
EYE DROPS



STERILE OPHTHALMIC  
SOLUTION

Manufactured by:  
REMINGTON PHARMACEUTICAL INDUSTRIES (PVT.) LTD.  
18 Km Multan Road, Lahore - Pakistan.





used to widen (dilate) the pupil of the eye in preparation for certain eye examinations. It belongs to a class of drugs known as anticholinergic

same as Cyclopentolate

acts in the eye to block the action of acetylcholine, and accommodation ciliary muscle of lens





phenylephrine acts directly on  $\alpha$ -adrenergic receptors in the eye, producing contraction of the dilator muscle of the pupil and constriction of the arterioles in the conjunctiva





Tropicamide is a synthetic muscarinic antagonist with actions similar to atropine and with an anticholinergic property. Upon ocular administration, tropicamide binds to and blocks the muscarinic receptors in the sphincter and ciliary muscle in the eye. Dilates pupil

# anticholinergic

block the response of sphinctor muscles of iris and accommodative muscles of ciliary body, to stimulation by ACH

Dilation of the pupil (mydriasis) and paralysis of accommodation

last ups 24hrs





proparacaine is a topical  
anesthetic drug

last from 15 min or  
more

Na channel Blocker

① side effects Tropicamide

- > light sensitivity ↑
- > Headache
- > blurred vision.

- uses
- > pupil dilation.
  - > cataract surgery.
  - > laser application
  - > Refractive disorder
  - > Uveitis

4-5 hours

② cyclopentolate : (accommodation) block

M1 Receptor block.  
α1, α2 receptor act

- side effect
- > burning of eye
  - > irritation
  - > light sensitivity ↑
  - > Fainting.

- uses
- > cycloplegia.
  - > Refraction in children.

long

Alcaine **DEDICATED**

③ Alkan (Proparacaine)

-> act as local anesthetic. Na channels blockers.

- side effect
- > Redness
  - > light sensitivity ↑
  - > watering of eye
  - > photophobia

- + To my parents and teachers, for their prayers.
- + To my children: Dr. Asma, Dr. Asadullah, Dr. Kulsoom & Eng. Samiullah, for their patience.
- + To all my students, for their encouragement.

uses  
-> dilation.

④ ethifrin / phenylephrine

-> constrict blood vessels and dilate pupil.

- side effect
- > Increased light sensitivity
  - > Headache
  - > dizziness

Iris shadow.

- > Immature
- > Hypermature.

uses.

Corneal opacity

# Castroviejo caliper



# Wire vectis

dents to help them understand  
n diagnosis and management of  
ndergraduate medical studies.

Investigation, treatment and

ve, Pupil, Orbit, Ocular injuries, and





Wire speculum

# Clinical Ophthalmology Text & Atlas

*Clinical Ophthalmology-Text & Atlas* is particularly designed for undergraduate students of this complex subject. This new edition comes up with the details of recent advances in various eye diseases and it almost covers the entire curriculum of ophthalmology for undergraduate students.

## Key Features of 6<sup>th</sup> Edition:

**Revision of each chapter** to keep abreast of the newer concepts and principles of investigation and surgical procedures in various eye diseases.

**Addition of new topics** in chapters on Cornea, Cataract, Retina, Glaucoma, Optic nerve, Pterygium and Strabismus.

**Included over 580 photographs** in chapters with color plates to highlight and augment the text.

**New chapter** on systemic drugs with ocular side effects.

**Concise step-by-step account** of important surgical procedures to build proper concepts.

## About the Author

Dr. Shafi M. Jatoi passed FCPS Ophthalmology in 1990 from College Of Physicians and Surgeons, Dow Medical College, now Dow University of Health Sciences. He is currently Director Academics, Liaison Officer, and Head of Department of Ophthalmology, Dow University of Health Sciences.



# Ophthalmology

## Text & Atlas

### Needle holder

**Text & Atlas** is particularly designed for undergraduate students to help them. This new edition comes up with the details of recent advances in diagnosis and management and it almost covers the entire curriculum of ophthalmology for undergraduate medical students.

**Features:**  
**Updated** to keep abreast with newer concepts and principles of investigation, treatment and management of various eye diseases.

**Topics** in chapters on Cornea, Uveitis, Retina, Glaucoma, Optic nerve, Pupil, Orbit, Ocular Infections.

**Color photographs** in chapters and color plates highlight and augment understanding of various ocular conditions. Includes systemic drugs with ocular side effects.

**Account** of important surgical procedures to build proper concepts.

He obtained FCPS Ophthalmology in 1990 from the College Of Physicians and Surgeons, Pakistan and worked at Dow Medical College, now Dow University of Health Sciences. He has served as Professor and Chairman, Department of Ophthalmology & Director Academics, Liaquat University of Medical and Health Sciences. He is still a regular examiner of DO, MS, MCPS and FCPS examinations in Ophthalmology.

Iris repositor



Clinical  
Ophthalmology  
Text & Atlas

*Clinical Ophthalmology-Text & Atlas* is particularly designed for undergraduate students to help th  
this complex subject. This new edition comes up with the details of recent advances in diagnosis and  
various eye diseases and it almost covers the entire curriculum of ophthalmology for undergraduate m

Lid  
gaurd



# Clinical Ophthalmology Text & Atlas

## Corneal scissors

**Text & Atlas** is particularly designed for undergraduate students to help them understand. This new edition comes up with the details of recent advances in diagnosis and management and it almost covers the entire curriculum of ophthalmology for undergraduate medical studies.

### 3rd Edition:

**Chapter** to keep abreast with newer concepts, and principles of investigation, treatment and various eye diseases.

**Topics** in chapters on Cornea, Lens, Retina, Glaucoma, Optic nerve, Pupil, Orbit, Ocular injuries.

**Photographs** in chapters and color plates to highlight and augment understanding of clinical pictures. Systemic drugs with ocular side effects.

**Account** of important surgical procedures to build proper concepts.

passed FCPS Ophthalmology in 1990 from College Of Physicians and Surgeons, Pakistan and joined in Dow Medical College, now Dow University of Health Sciences. He has served as Professor, Chairman, Department of Ophthalmology & Director Academics, Liaquat University of Medical and Health Sciences, Faisalabad. He is still a regular examiner of DO, MS, MCPS and FCPS examinations in various parts of Pakistan. He is recipient of awards: Syed Ramzan Ali gold medal.

# Clinical Ophthalmology Text & Atlas

particularly designed for undergraduate students to help them understand  
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entire curriculum of ophthalmology for undergraduate medical studies.

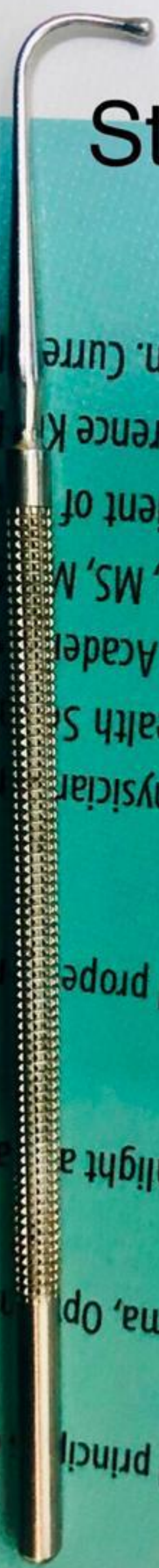
## Punctum dilator

with newer concepts and principles of investigation, treatment and

Cornea, Uvea, Retina, Glaucoma, Optic nerve, Pupil, Orbit, Ocular injuries, and

to highlight and augment understanding of diseases

# Strabismus hook



Retail Price  
ISBN: 978-1-904-111-11-1

Education Commission, Islamabad Pakistan. Currently, he is working as the Professor,  
Pakistan, Asia Pacific award in APAO conference of Surgeons Pakistan. He is recipient of  
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of investigation, treatment and  
various eye diseases.  
pter to keep abreast with newer concepts and principl  
Edition:  
almost cover the entire curriculum of ophthalmology for undergraduate medical studie  
advance students in diagnosis and management to help them understand

# Lacrimal Probe



Clinical  
Ophthalmology  
Text & Atlas

# Entropion clamp



*ology-Text & Atlas* is particularly designed for undergraduate students to understand  
t. This new edition comes up with the details of recent advances in diagnosis and treatment of  
s and it almost covers the entire curriculum of ophthalmology for undergraduate medical studies.  
investigation, treatment and



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**Lucid step-by-step account** of important procedures to build proper concepts.

**Chalazion  
clamp**

**About the Author**  
Dr. Shafi M. Jatoi passed M.S. Ophthalmology from the University of Physicians and Surgeons, Pakistan. He has served in various capacities in the field of Health Sciences. He has served



Chalazion scoop

Clinical  
Ophthalmology  
Text & Atlas



ogy

s

IOL

forceps

graduate students to help them  
advances in diagnosis and manag  
ology for undergraduate med

principles of investigation, treatment

Optic nerve, Pupil, Orbit, Ocular

standing o





Castroviejo's needle holder

# 1. Suture tying forceps

1 →



2 →



# 2. Corneal forceps

# Two way irrigation and Aspiration cannula

Clinical  
Ophthalmology  
Text & Atlas

particularly designed for undergraduate students to help them understand  
comes up with the details of recent advances in diagnosis and management of  
the entire curriculum of ophthalmology for undergraduate medical studies.

deal with newer concepts and principles of investigation, treatment and  
cases.

Cornea, Uvea, Retina, Glaucoma, Optic nerve, Pupil, Orbit, Ocular injuries, and

of diseases

ology  
clas

# Chopper

Or  
Dialer

undergraduate students to help them understand  
recent advances in diagnosis and management of  
ophthalmology for undergraduate medical students.

and principles of investigation, treatment and

Glaucoma, Optic nerve, Pupil, Orbit, Vision



Blade Holder

Clinical  
Ophthalmology  
Text & Atlas







conjunctival Forceps



artery Forceps



Fluorescence  
Dye Strip

13) hydrodissection cannula



14) lacrimal cannula



7)

Spring scissors



retrobulbar  
hemorrhage  
cardiac arrest  
cardiac failure  
respiratory failure  
optic atrophy

extracapsular cataract extraction  
surgery  
phacoemulsification femtosecond  
laser surgery  
small manual extraction surgery  
conventional extracapsular  
cataract extraction surgery  
intracapsular cataract extraction  
surgery

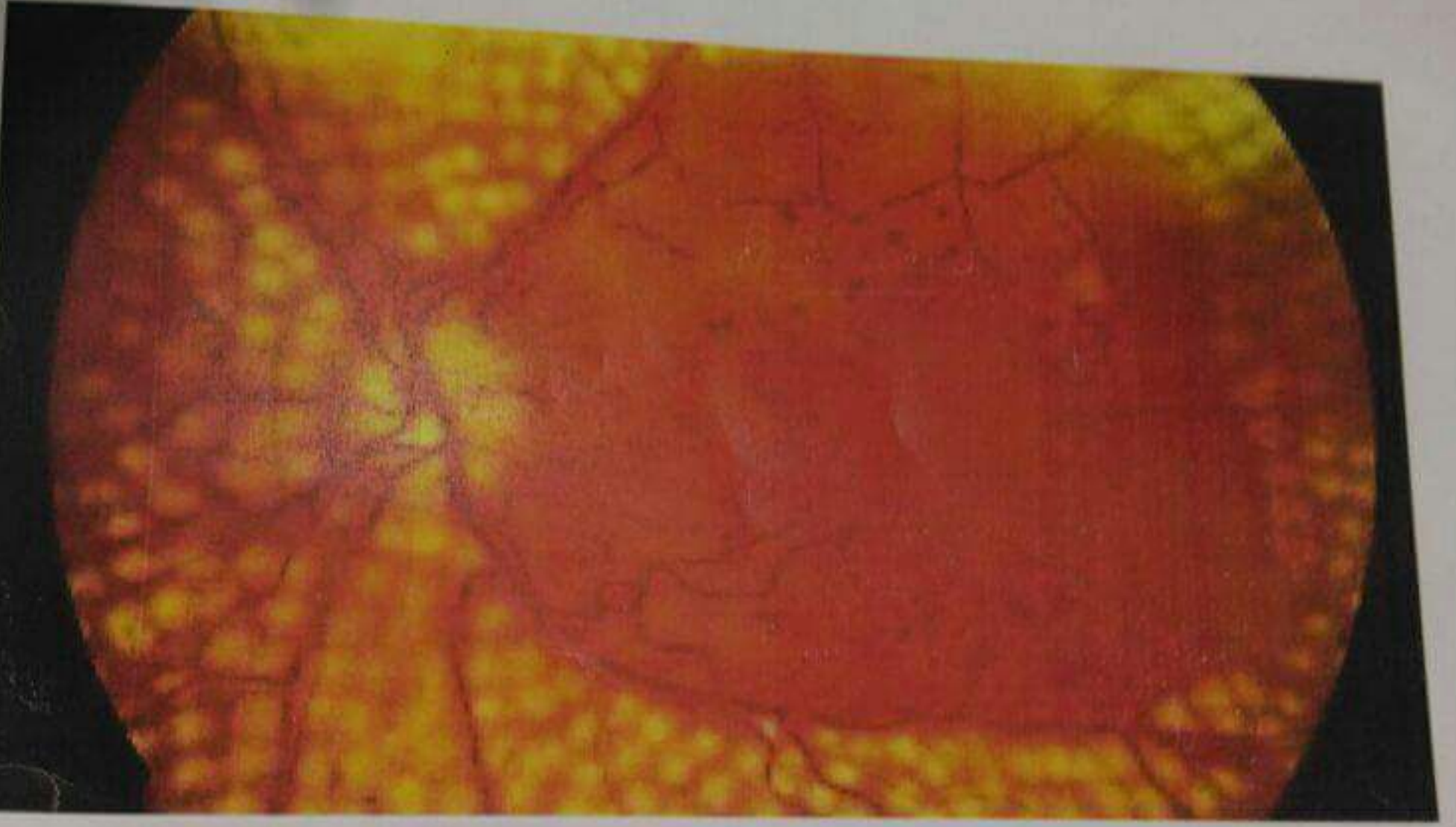
Pars Plana Lensectomy



mature cataract.....hypr mature

chronic endophthalmitis  
Post. capsular  
opacification corneal  
corneal edema  
subluxation  
opacification of IOL  
retinal detachment

- What is your diagnosis?
- What are different surgical techniques used to treat?
- Enumerate complications of local anesthesia in this case.
- What is most common Late Post-operative complication after surgery?



photocoagulation



pterygium



# papilloedema



- intracranial space occupying lesion  
Brain Tumor abscesses
- benign intracranial hypertension
- intracranial infection
- intracranial hemorrhage
- tumor of spinal cord
- vitamin A toxicity

- treat the underline cause
- control the raised intracranial pressure by:
  - diuretics
  - repeated lumbar puncture
  - ventriculo lumboperitoneal stunt
  - optic nerve sheath decompression

- What is your diagnosis?
- Enumerate its common causes.
- What are its treatment options?

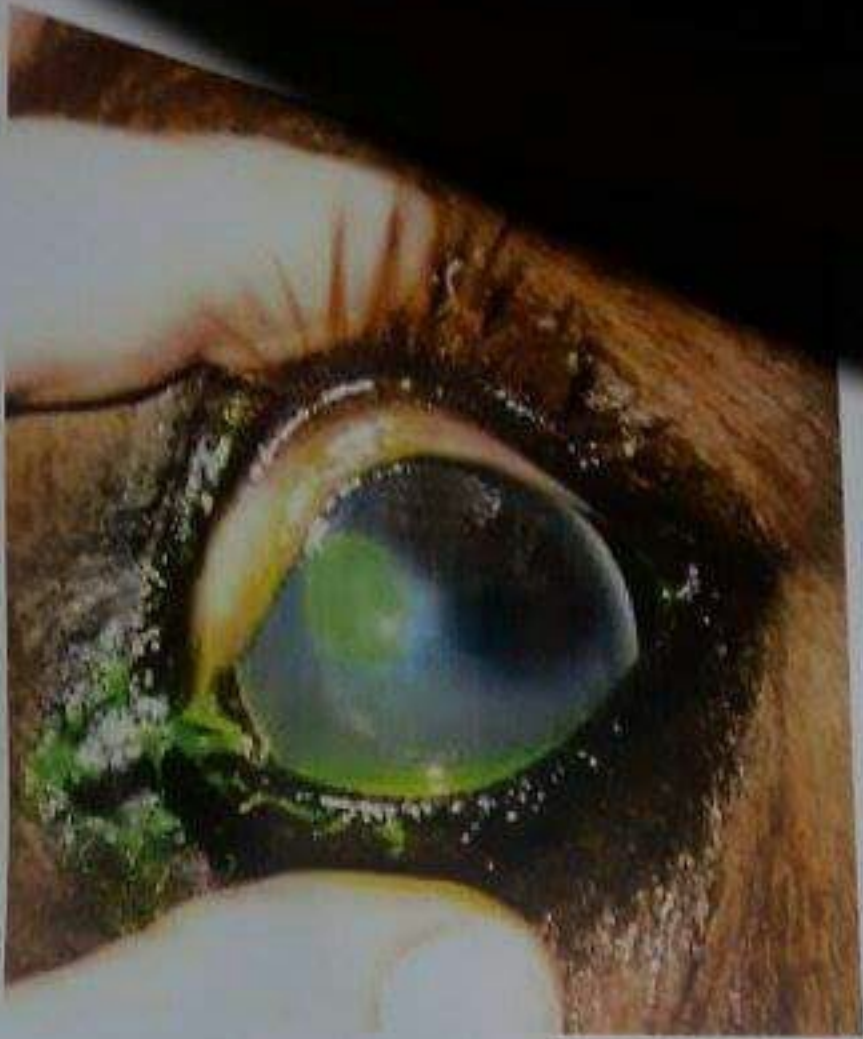


## divergent squint

- due to nerve lesion
- weakness of the muscles
- brain center lesion

- What is your diagnosis?
- What is its pathogenesis?
- How you will treat this condition?

patching of normal eye  
correction the refractive error  
amblyopia therapy  
bifocal glasses  
surgery recession and resection  
Orthoptic exercise



## staining of crneal ulcer with flourescine stain

- What is Lesion?
- Enumerate treatment options.
- What are three basic aims to treat it?
  - control of the infection
  - relief pain
  - treatment of the descemetocoele
  - treatment of the non healing & healing corneal ulcer

- topical and systemic antibiotics
- Analgesics
- conjunctival flap
- therapeutic keratoplasty
- tarsorrhaphy

Corneal ulcer  
 Proliferative  
 Infection - treated w/ antibiotics  
 Descemetocoele



exogenous allergens act as antigen and induce formation of immunoglobulin IgE causing antibody antigen complex formation which reacts with the mast cells and causes the release of chemical mediators which produce inflammatory other signs and symptoms

vernal

- What is your diagnosis? keratoconjunctivitis
- What is its Pathogenesis?

• What measures you will advise patient to take care?

- Enumerate drugs used to treat this condition.

Avoid exposure to allergens.  
Keep hygiene  
cold compresses

mast cell stabilizer  
antihistamine  
topical steroids  
acetylcysteine  
topical cyclosporine  
immunocompressive antigen  
oral histamine



## dendritic ulcer

- What is Lesion? infection due to herpes simplex virus I & II
- What is most common cause of such findings?
- What are different drugs used to treat this condition?
  - Topical anti viral
  - acyclovir
  - acycloguanosine
  - adenine arabinoside



## subconjunctival hemorrhage

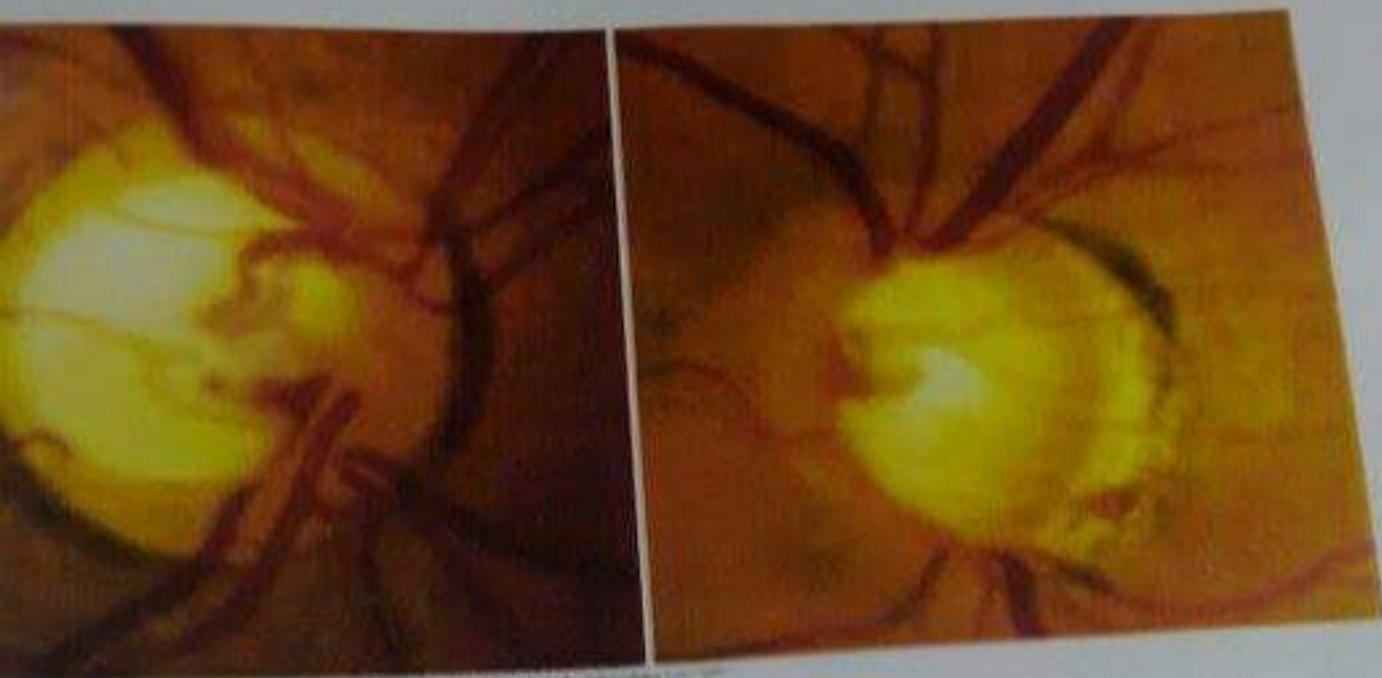
Subconjunctival hemorrhage doesn't require treatment. Artificial tears can help relieve eye irritation if it occurs. Most broken blood vessels heal within 2 weeks. Larger spots may take longer to go away. No blood thinners should be used.

- What is this?
- What are its causes?
  - trauma
  - bleeding disorder
  - straining of eye
  - idiopathic
- What are its treatment options?



## sweling of lid.....stye

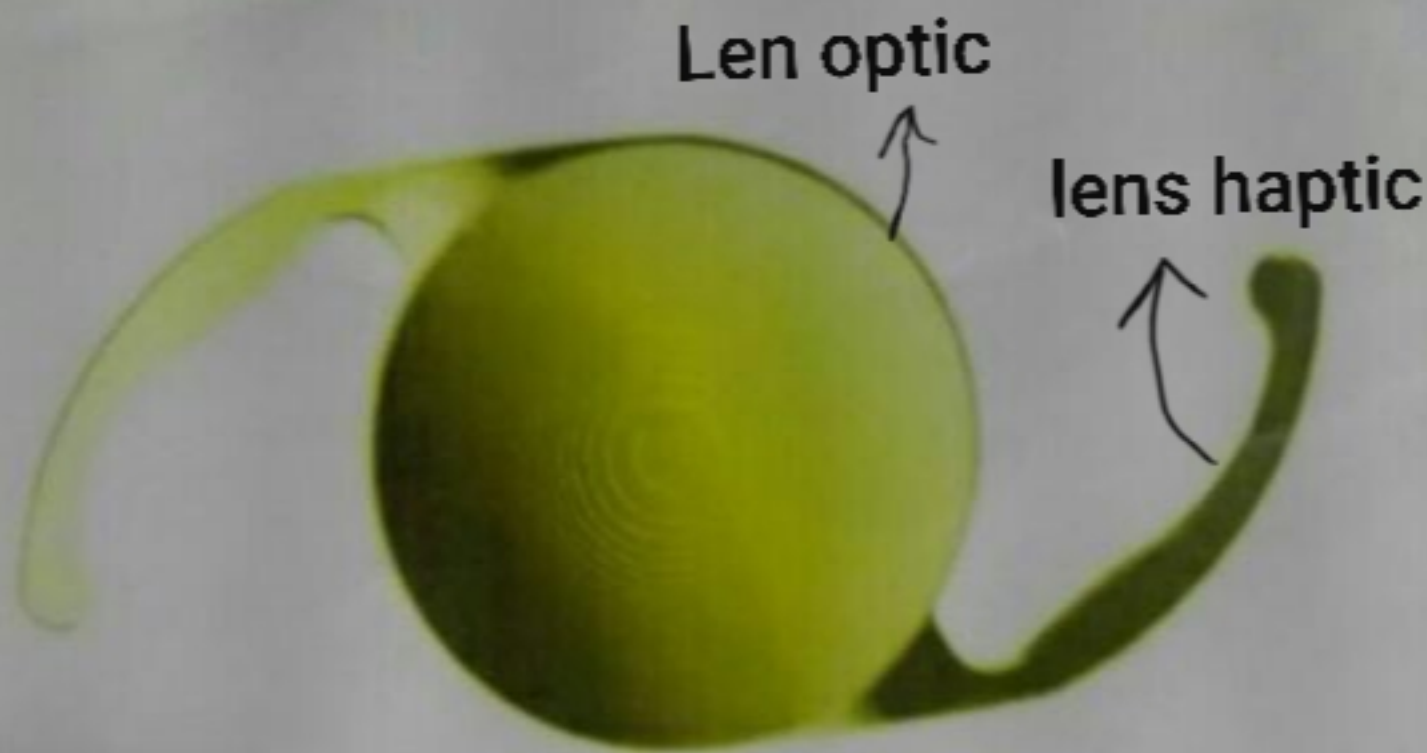
- What is your diagnosis?
  - Enumerate treatment options.
  - What type of incision is given and why? Give two reasons.
    - Internal Incision vertically
      - minimize the area of cornea swept by a scar during blinking
      - Protected from getting infected
    - External Incision Horizontally:
      - for optimal cosmesis
- analgesics for pain  
systemic antibiotics  
topical antibiotics  
warm compresses  
evacuation of pus



## cupping of optic disc.....glaucoma

- What are your findings?
- What other investigations you will advise for diagnosis? **FIT GPS**
- What are medical options to treat this condition?
  - medical treatment:
    - prostaglandin(lanoprost)
    - beta blockers (timolol )
    - adnergics(epinephrine)
    - CAI (Dorzolamide)
  - laser trabeculoplasty:
    - Argon laser trabeculoplasty
    - Selective laser trbeculoplasty
  - surgical treatment:
    - Trabeculectomy
    - Deep sclerectomy





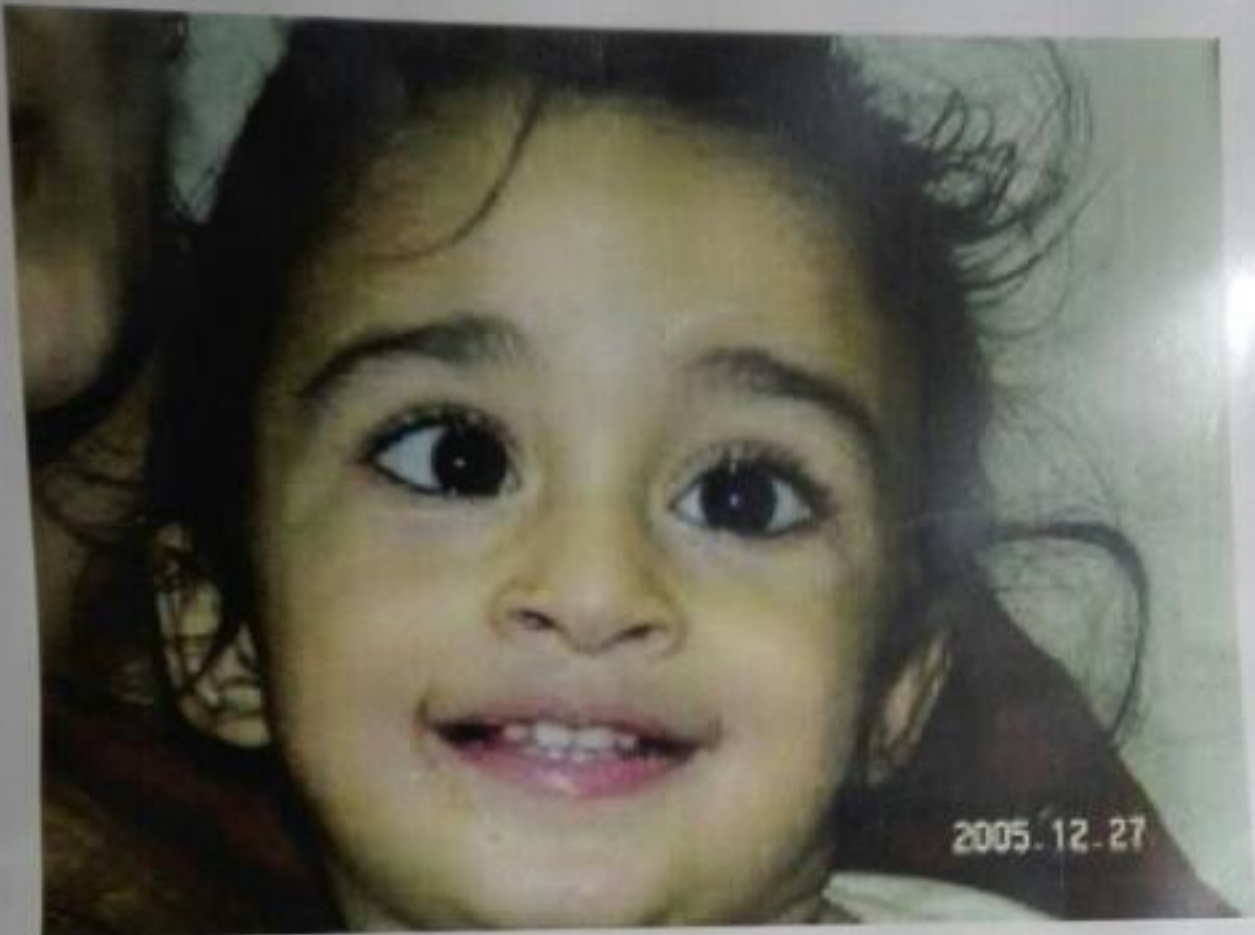
Polymethylmethacrylate  
Silicone  
hydrophobic acrylate  
hydrophilic acrylate  
Collamer

- What is this?
- What are its parts?
- Which type of material is used? Enumerate.
- What is its ideal Post-Surgical location in eye?

Anterior chamber

Lens

2:10 PM



## A - Convergent Squint

B - Occurs due to the damage of nerve supplying the eye muscles or weakness of the eye muscles

- What are your findings?
- What is its pathogenesis?
- How you will treat this case



full correction of refractive  
amblyopia therapy  
bifocal glasses  
lens surgery recession  
resection  
Orthoptic exercise  
patching of the normal eye



1. Describe this picture 1

2. Name the sign shown in this picture. 1

3. What is the cause of this phenomenon? muscles

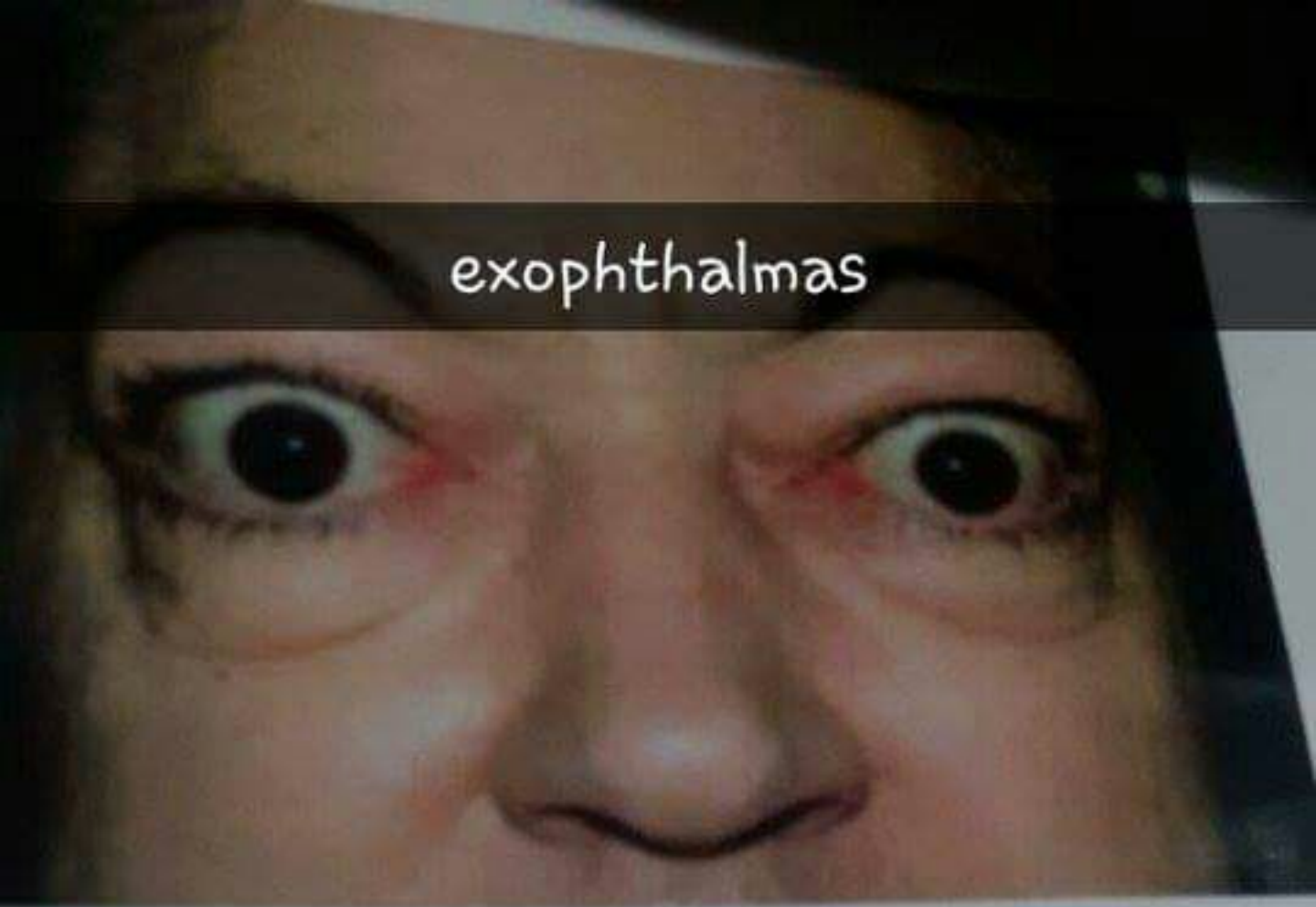
4. How will you treat this patient?

**FLAB**

Due cross innervation of the mandibular branch of the Trigeminal nerve and oculomotor nerve supplying to mastication muscles

# Marcus Gunn Jaw winking ptosis

exophthalmas



TED Thyroid Eye Disease

- What is your diagnosis?
- Enumerate three signs in this patient.
- How you will treat this condition?

stellwag Sign  
von-Graefe's  
Mobius Sign

Anti-Thyroid  
Syst. corticosteroids  
artificial tears  
topical NSAIDs  
extraocular muscle surgery  
eyelid surgery



# Exophthalmos

- What is your diagnosis? (2)
- Enumerate three prominent signs in this patient. (1.5)
- How you will treat this condition? (1.5)



- What is your diagnosis? (1)
- Enumerate treatment options. (2)
- What type of incision is given and why? (4)

Chalazion