

# **PANEL DISCUSSION**

**GRADUAL PAINLESS LOSS OF VISION**

**19 AUG 2015**

# CASE HISTORY

- A 64yr old male complaining of Diminution of vision in both eyes since 1yr (RE>LE)
- Diminution of vision was
  - ✓ Painless
  - ✓ Gradual
  - ✓ Progressive in both eyes

## **PAST HISTORY:**

- No h/o Ocular Trauma
- k/c/o diabetes mellitus since 7yrs on regular medication

## **FAMILY HISTORY:**

- Nil significance

# DIFFERENTIAL DIAGNOSIS

- ✓ Painless, Gradual, Progressive diminition of vision

- Refractive errors
- Senile cataract
- Corneal degeneration and dystrophy
- Age Related Macular degeneration
- Diabetic Retinopathy
- Optic atrophy
- Progressive pterygium

# PSM

- **WHO definition of blindness ?**
- **Burden of blindness in world and India ?**
- **What is preventable blindness?**

# OCULAR EXAMINATION

## Visual Acuity and Slit-lamp Examination

	<i>OD</i>	<i>OS</i>
<i>Visual acuity</i>	<i>CF- 1mts With pinhole -NI</i>	<i>CF-5mts With pinhole 6/60</i>
<i>Near vision</i>	<i>N60</i>	<i>N36</i>

- Facial symmetry – Maintained
- Head posture - Normal
- Ocular symmetry – Maintained
- Forehead – Normal
- Extra ocular movements – Full range in all directions

## SLIT LAMP EXAMINATION

	OD	OS
EYELIDS	<b>Normal</b>	<b>Normal</b>
CONJUNCTIVA	<b>Normal</b>	<b>Normal</b>
CORNEA	<b>Normal in size,elliptical in shape,regular surface,transparent and normal corneal sensations</b>	<b>Normal in size,elliptical in shape,regular surface,transparent and normal corneal sensations</b>
ANTERIOR CHAMBER	<b>Normal depth, PACD=1/2 CT ,clear contents</b>	<b>Normal depth, PACD=1/2 CT ,clear contents</b>
IRIS	<b>Normal pattern &amp; colour</b>	<b>Normal pattern &amp; colour</b>
PUPIL	<b>3-4mm in diameter Brisk Reaction to Direct and Indirect Light</b>	<b>3-4mm in diameter Brisk Reaction to Direct and Indirect Light</b>
LENS	<b>Normal position ,greyish white in colour with nuclear and cortical opacities and PSCO(NSGr-III)</b>	<b>Normal position ,greyish white in colour with nuclear opacity(NSGr-III)</b>



# Positive findings - Summary

- History : Diminution of vision was Painless, Gradual and Progressive in both eyes
- Examination:

RE: Nuclear and cortical opacities and PSCO(NSGr-III)

LE: Nuclear opacity(NSGr-III)

# Differential diagnosis

- Senile cataract
- Age Related Macular degeneration
- Diabetic Retinopathy
- Primary Open angle glaucoma

**INVESTIGATIONS?**

- Systemic : RBS and BP
- Ocular : Indirect ophthalmoscopy -Fundus Examination
  - Macular function tests
  - B-Scan
  - A-Scan and Keratometry
  - IOP
  - Sac Syringing

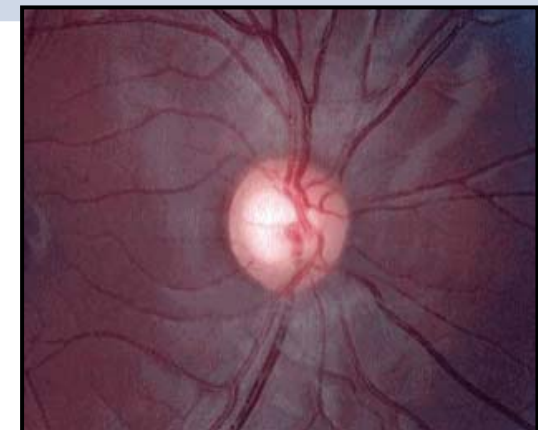
# INTRAOCULAR PRESSURE

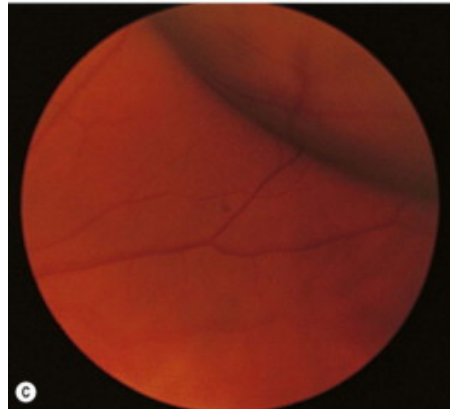
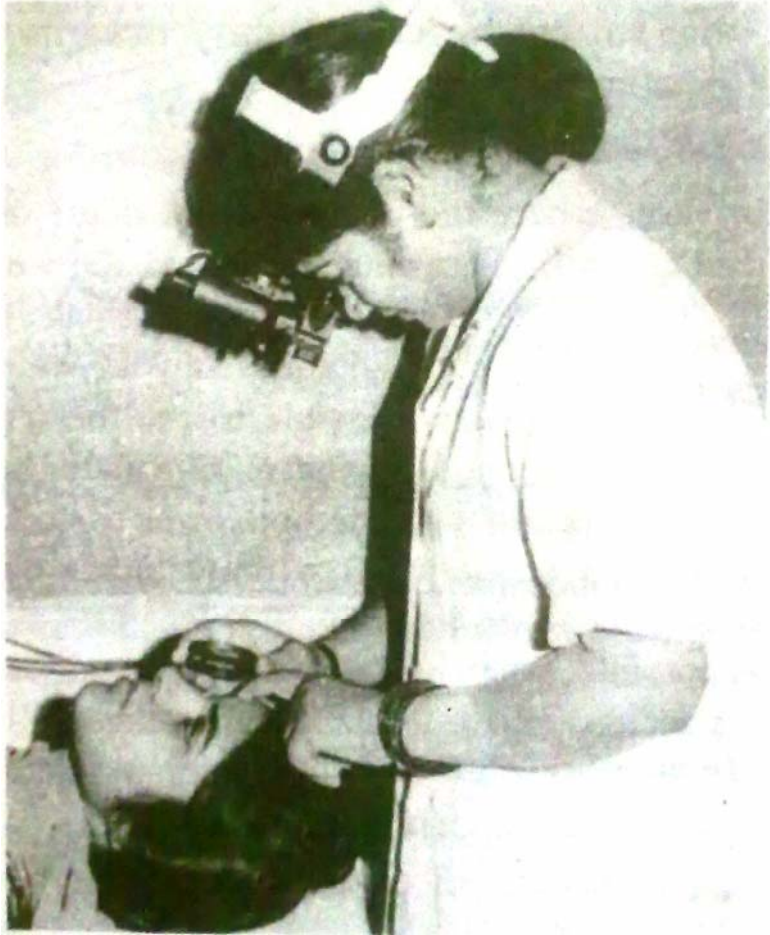
	OD	OS
<b>On the day of presentation at 11 AM With Applanation Tonometry</b>	16 mm Hg	16 mm Hg



# FUNDUS EXAMINATION

	OD	OS
Media	Media hazy d/t lenticular opacity	Media hazy d/t lenticular opacity
Disc	Normal in size, Pink, Circular, Well defined margins CDR-0.3:1	Normal in size, Pink, Circular, Well defined margins CDR-0.3:1
Vessels	Not clear	Normal, A:V Ratio-2:3
Macula	Not clear	Normal, FR-Dull
Periphery	Not clear	Normal



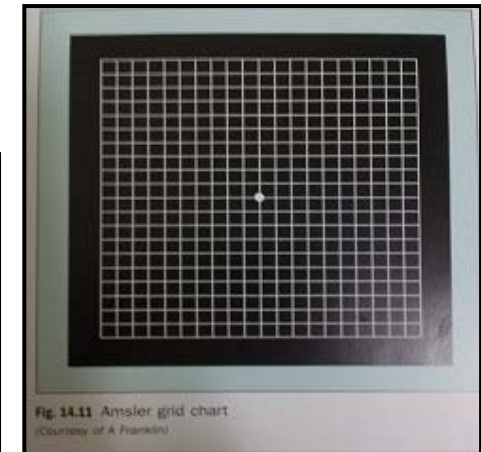
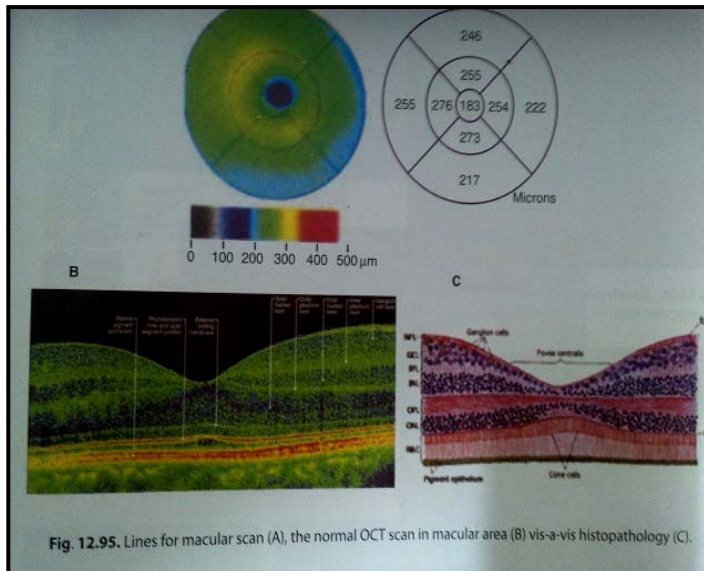


# **MACULAR FUNCTION TESTS?**



# Macular function tests with clear media

- **Visual acuity**
- **Colour vision**
- **Contrast sensitivity**
- **Slit lamp biomicroscopy**
- **OCT**
- **FFA**
- **Amslers grid**
- **Photo stress test**



# Final Diagnosis

BE- Immature Senile Cataract

# SPM

- Social and cultural barriers to use cataract surgical services.
- Screening procedures for detection of curable blindness

**TREATMENT?**

# Treatment Options

- Medical - NOT APPLICAPABLE
- Optical
- Surgical

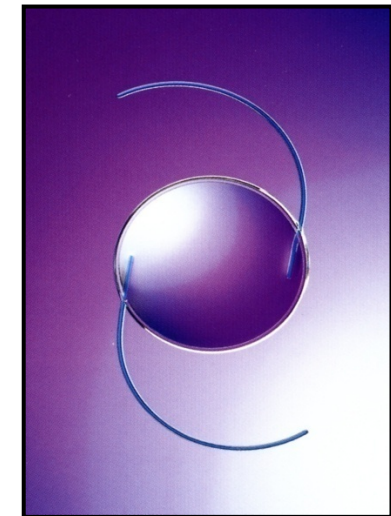
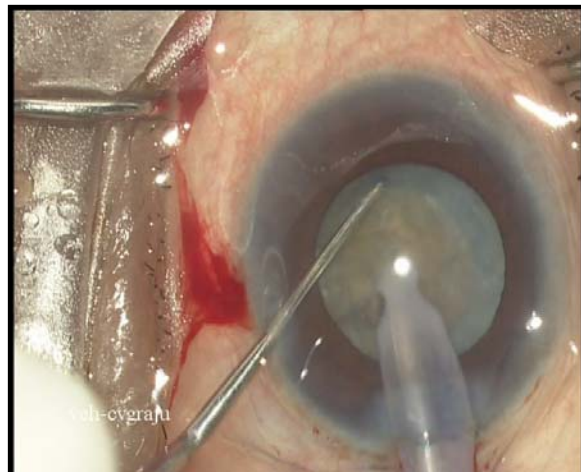
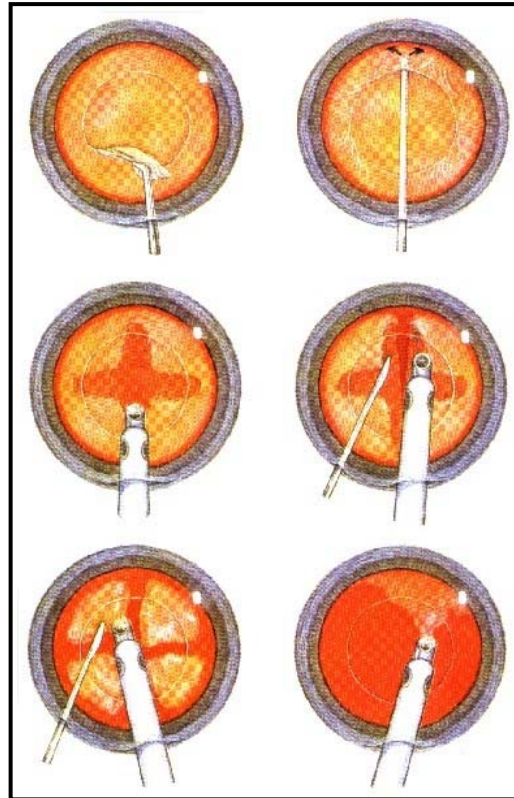
# Hospital Administration

- Location of ophthalmology wards
- Post OP ward sterilisation
- OT sterilisation
- Ophthalmology surgical instrument set sterilisation

# Surgical Management

- **Principle:**
  - ✓ ICCE- Removal of cataractous lens
  - ✓ ECCE-Preservation of posterior capsule and IOL implantation
  
- ✓ Phacoemulsification- Cataractous lens is fragmented and aspirated utilizing ultrasound energy
  
- Gold standard

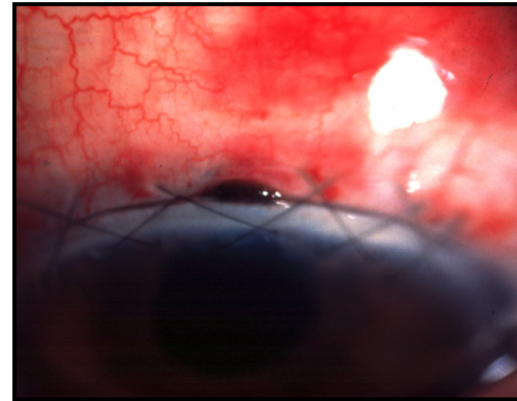
- Surgical
  - Extra Capsular Cataract Extraction(ECCE)
  - Intra-Capsular Cataract Extraction(ICCE)
  - Phaco-Emulsification With Intra-Ocular Lens implantation



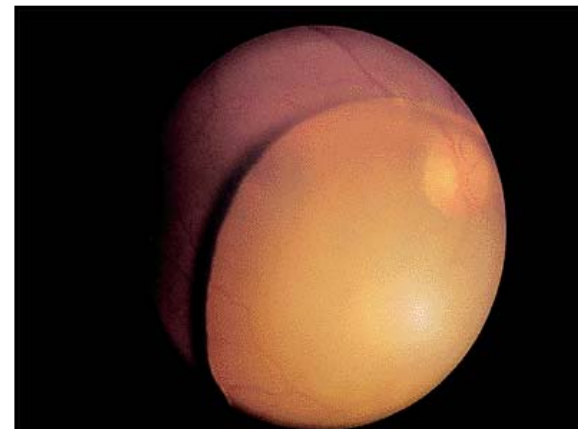
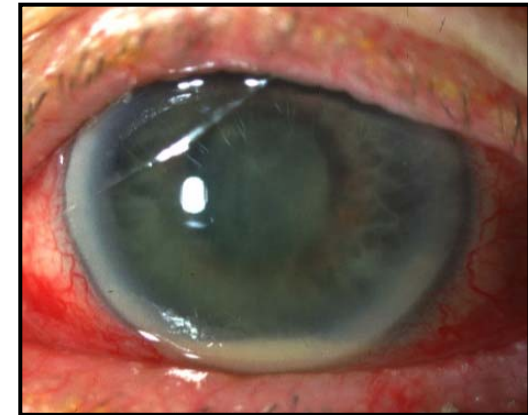
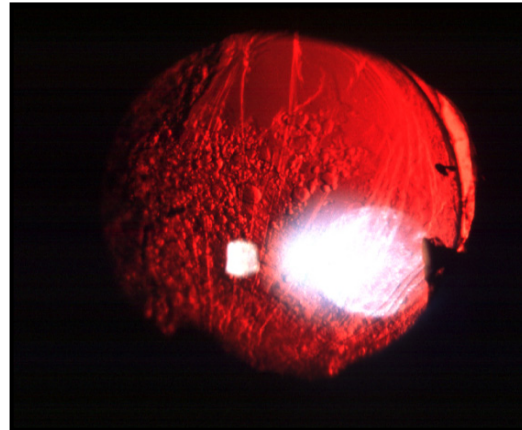


**COMPLICATIONS?**

- Intra OP:  
Injury to cornea(Descemet's detachment), Iris(Iridodialysis)  
Posterior capsule Rent  
Vitreous loss  
Nucleus drop



- Post OP:  
Iris prolapse  
Striate keratopathy  
Endophthalmitis  
Pseudophakic bullous keratopathy  
PCO



# HOSPITAL ADMINISTRATION

1. How to Organise camps?
2. How to manage materials and Crowd?
3. What are the OT Requirements for ophthalmic surgeries? Eg: CATARACT.

# PODSCORB

PLANNING

ORGANISING

DIRECTING

STAFFING

CONTROLLING /CO-ORDINATING

REPORTING

BUDGETING



INPUT – Man, Material, Money, Method, Machine

PROCESS – Method, Procedures

OUTPUT – Effect, Treatment

OUTCOME – Effectiveness, Efficiency

# PROBLEMS / ISSUES

- Administrative issues
- Legal issues
- Technical issues
- Medical ethics / Social ethics / Business ethics

# SPM

- National programme to control blindness in India ?
- What is vision 2020 and diseases covered in it ?

**THANK YOU**