



Retinopathy of Prematurity

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ROP- Introduction

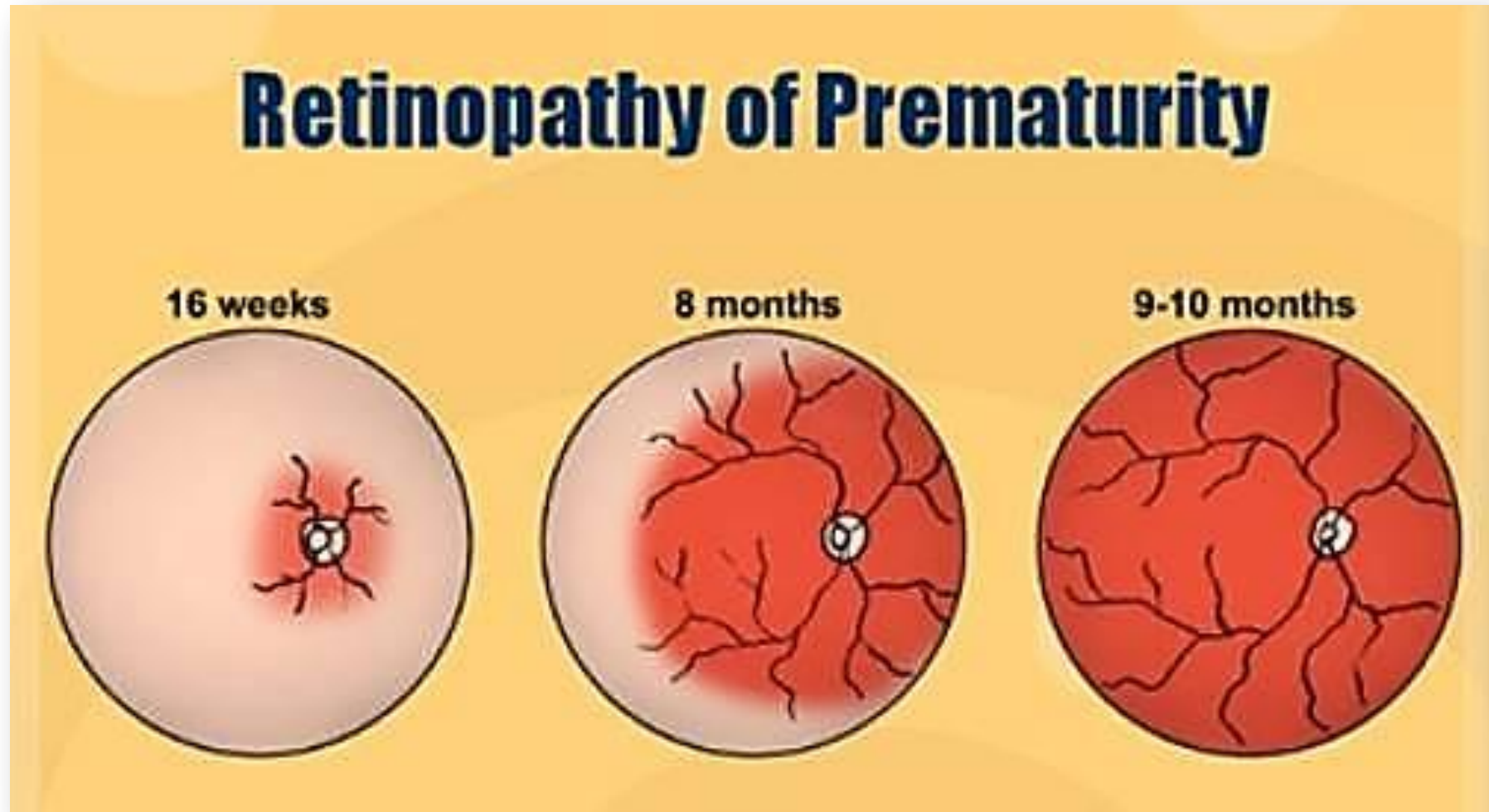


- Premature babies
- Immature retinal blood vessels
- Incidence of ROP is increasing in India due to improved neonatal survival
- 3.5 million infants are born premature in India annually
- ROP is leading cause of preventable infant blindness in India

ROP- Indian scenario

- ✓ 27 million live births
- ✓ 9% are born < 2000 g
- ✓ Lack of quality and standardized neonatal care
- ✓ Fewer trained ROP specialists confined to urban areas and tertiary hospitals
- ✓ Majority of population in rural areas

Normal Retinal Vascular Development



RISK FACTORS

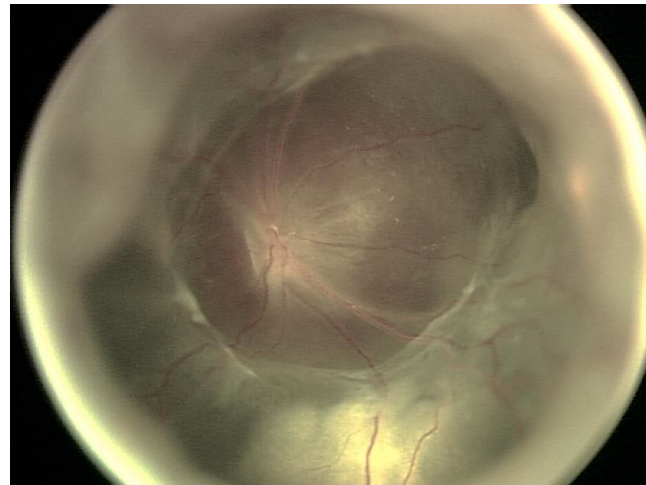
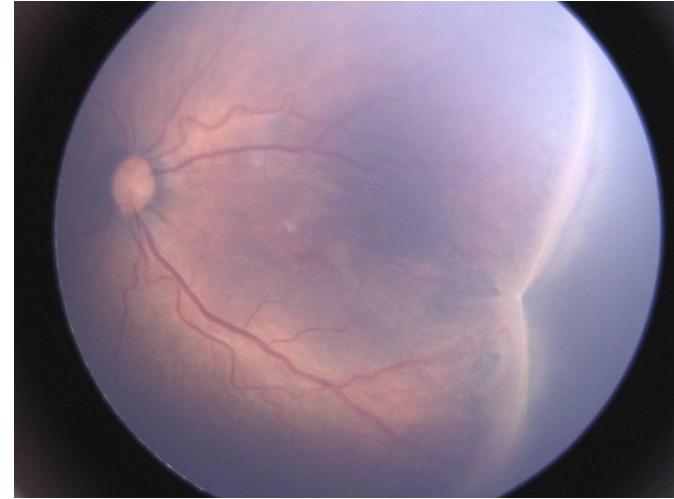
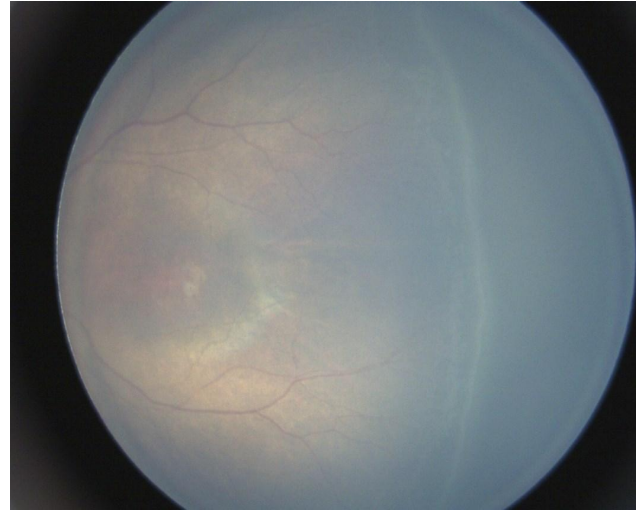
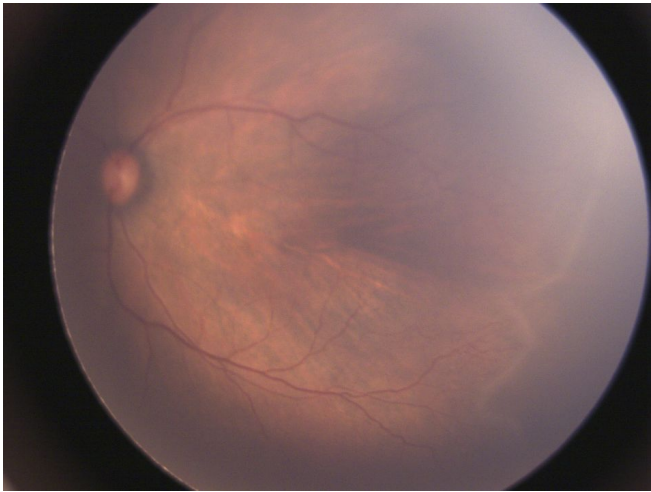
- Prematurity
- Birth weight
- Oxygen supplementation



Babies Need Screened:

- Birth weight < 1700 g
- Gestational age at birth < 34–35 weeks
- Exposed to oxygen > 30 days
- Infants born at < 28 weeks

What happens if the babies are not screened in time?



Abnormal vascular development progresses through various stages to retinal detachment, leading to irreversible blindness.

ROP Screening



ROP Screening – Our Initiative



ROP Screening by trained technicians - Telemedicine Approach



Tele-screening increases outreach to more babies, especially in remote areas



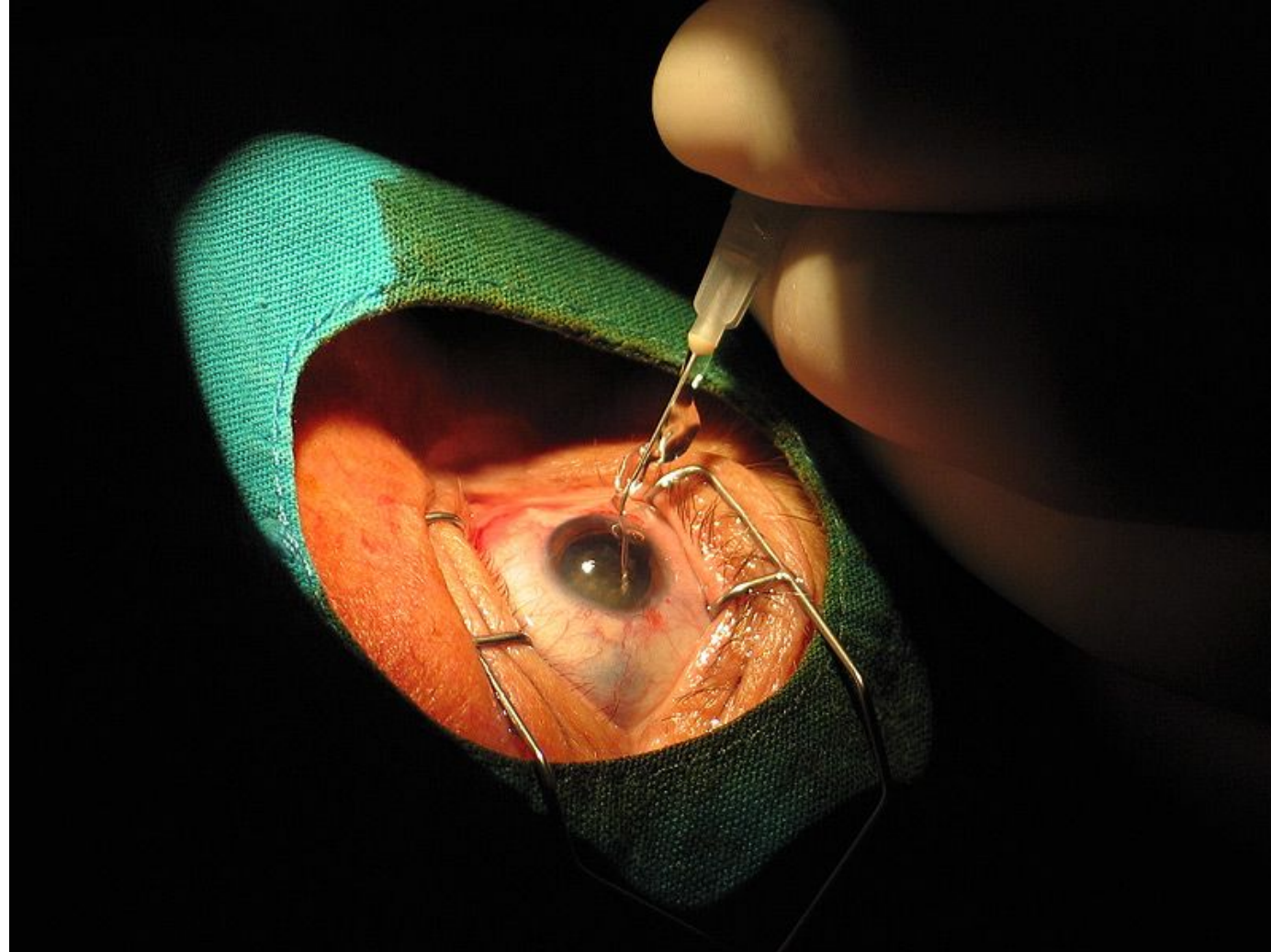
Counseling mother & relatives about ROP



ROP Treatment - LASER



ROP Treatment - Injections



Telemedicine ROP – Our Progress

- Babies screened from 2015 through 2018 – **2,181**
- Number of babies requiring treatment - **158**
 - 102 babies treated with laser alone
 - 25 babies treated with injections only
 - 32 babies received combined treatment

***No child is left behind.
Treatments are performed
regardless of payment.***



This child attended the Goutami Institute last week. She was treated 10 months ago for ROP.



OUR GOAL

No child should lose vision due to lack of ROP screening.

If screenings are not performed, the consequences could be disastrous





“There can be no keener revelation of a society's soul than the way in which it treats its children” – Nelson Mandela

“Children are our most valuable natural resource”- Herbert Hoover

**Thank
You**

Recent NY Times Article:
A Simple Way to Improve a Billion Lives
(some estimate 2.5 billion)

12 year old Kumar moved to the front of the class room.
Progressive blurred vision forced him to give up
flying kites and playing cricket.

“Sometimes I don’t see a motor bike until it’s almost in my face.”

There are tens of millions of children just like
Kumar across the world whose families
cannot afford an eye exam or glasses to help
them excel in school.

Corneal Transplants at age 2

Doctorate in Pharmacy from Rutgers University

CEO of a multi-million dollar retail pharmacy company.



Our Dream: Green Eye Institute (2m-4m-4m)

- Outreach and Research
- Cantilever Drive-Through
- Vertical Structure
- Core Opening for Staying Cool with Minimal Air Conditioning

