

Retinal eye screening for preterm babies

in the first  of life can

prevent blindness



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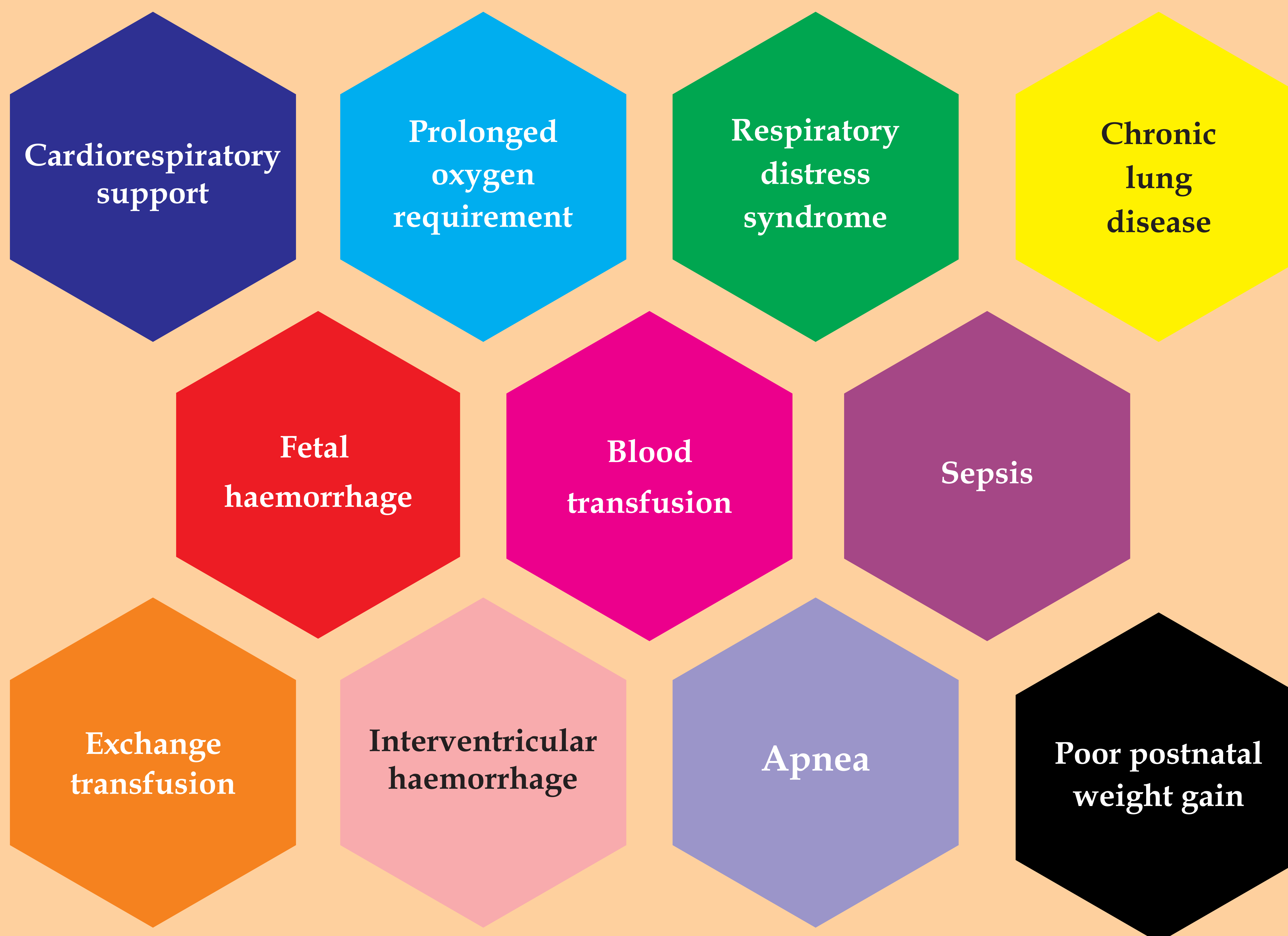
32,000
infants to go blind
every year due to
Retinopathy of
Prematurity

**Are you reaching out to an ophthalmologist for weekly screening
at your NICU/SNICU?**

Ready Reckoner To Prevent And Manage Retinopathy Of Prematurity (ROP)

Which babies to monitor?

- Born at 34 weeks or less gestational age OR weighing 2000 grams or less at birth
- Having any other risk factor



Protect newborn vision, be the light!



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Do's and don'ts



- **Avoid oxygen administration if the baby has good respiratory efforts**
- **Display oxygen saturation recommendation on the wall in the NICU**
- **Return to birth weight beyond 14 days of life is an important risk factor for ROP**
- **Avoid hypotension. Target mean blood pressure as per norms for gestational age**
- **Avoid interrupting intravenous infusion lines once initiated**
- **Discard intravenous fluid bottle 24 hours after it has been opened**

RETINOPATHY OF PREMATURITY



1
OUT OF
10
BABIES in INDIA
ARE PRETERM

Roles and Responsibilities of Obstetricians to prevent blindness in preterms

- ◆ Prevent prematurity in high risk cases
- ◆ Administer antenatal steroids for threatened preterm delivery
- ◆ Judicious oxygen therapy for newborn
- ◆ Promote institutional delivery
- ◆ Promote and facilitate exclusive breast feed
- ◆ Counselling families for timely screening of preterm babies



Target group for ROP screening



- ◆ All infants born at ≤ 34 weeks
- ◆ All infants born at ≥ 34 weeks with risk factors
- ◆ All infants weighing ≤ 2000 grams at birth
- ◆ Other preterm infants based on the discretion of the pediatrician or neonatologist



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5 for sight

Precaution and Procedure for Screening

- 1. The 'step-down room' of the NICU is ideal.**
- 2. Last feed should be 1 hour prior to examination.
Swaddle the infant with warm, linen wraps.**
- 3. Dilate pupils & use an indirect ophthalmoscope or Retcam for ROP screening.**
- 4. An infant depressor and an infant wire speculum are essential.**
- 5. Monitor for apnea and bradycardia.**



RETINOPATHY OF PREMATURITY

WHOM TO SCREEN?

Gestation < 34 weeks Or Birth weight < 2000 grams

Any preterm infant with risk factors

- Cardiorespiratory support • Prolonged oxygen requirement • Respiratory distress syndrome
- Chronic lung disease • Fetal hemorrhage • Blood transfusion • Sepsis • Exchange transfusion
- Interventricular hemorrhage • Apnea • Poor post-natal weight gain

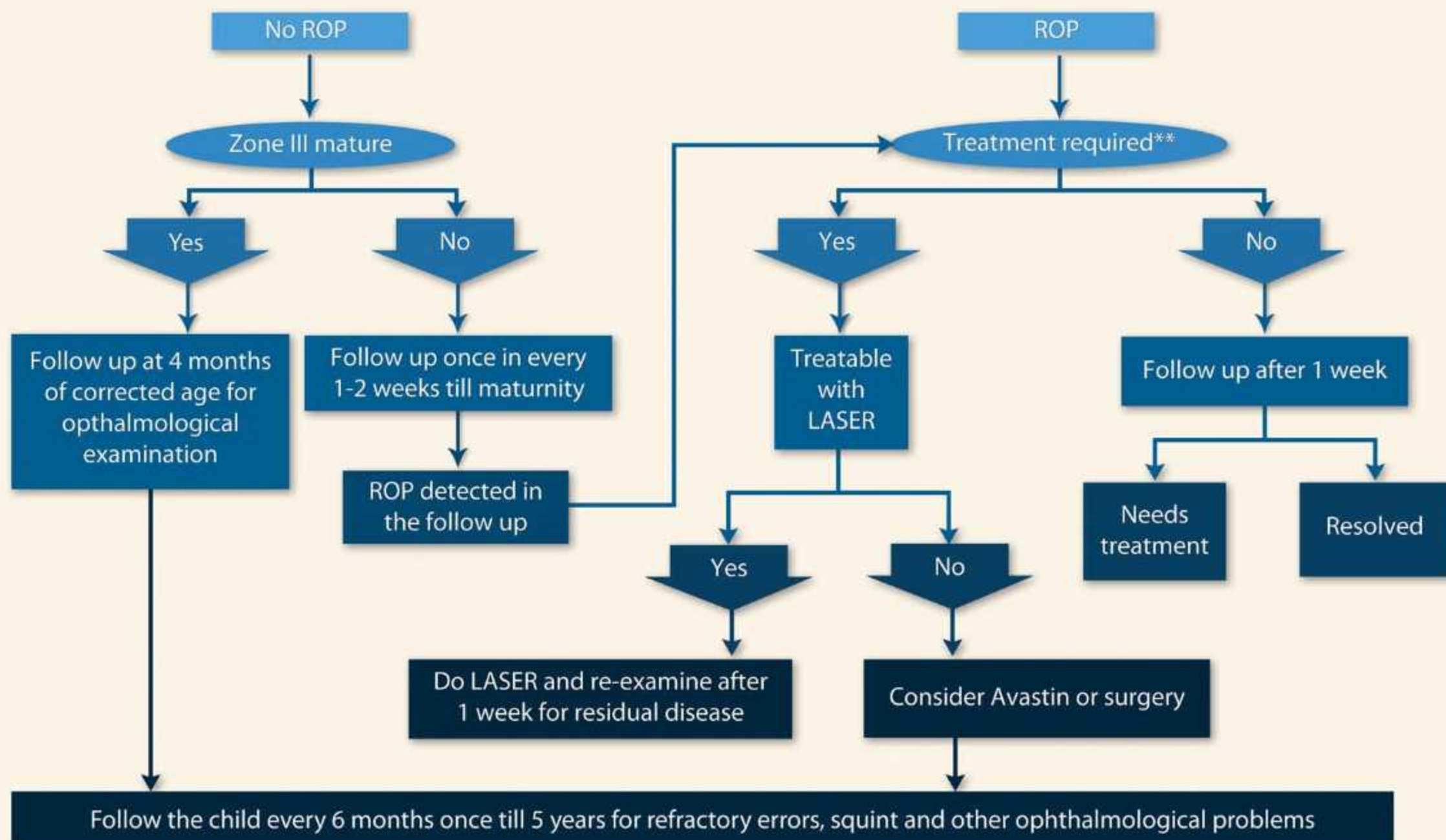
PREVENTIVE FACTORS

- Antenatal steroids
- Restrict use of Oxygen
- If baby on Oxygen target SpO₂ between 90 to 95%
- Use CPAP when required
- Early enteral nutrition (breast milk preferred)
- Aggressive nutrition therapy
- Following aseptic precautions
- Restrictive blood transfusion policy

AGGRAVATING FACTORS

- Small for gestational age
- Uncontrolled Use of Oxygen
- Patent ductus arteriosus
- Sepsis
- Inadequate weight gain
- Prolonged ventilation
- Transfusion of blood products

SCREEN AT 30 DAYS OF LIFE / AT DISCHARGE



Early screening and appropriate treatment is the key to success