ROP Screening Guidelines UIHC

Any one of the following criteria qualifies the patient for ROP screening

1. Infants with a birth weight of < 1500 grams
2. Infants with an estimated gestational age at birth of ≤ 30 weeks
3. Infants who are considered high risk by the Neonatologist

Timing of the first ROP examination

- Infants born ≤ 27 weeks gestation: 31 weeks postmenstrual age
- Infants born > 27 weeks gestation: 4 weeks chronological age
    - PMA (postmenstrual age) = Gestational age at birth + current chronological age in weeks
    - e.g., 22-week GA infant who is currently 9 weeks old thus PMA is 31 weeks
    - EPIC automatically calculates PMA
- If the infant qualifies for ROP screening but is to be discharged or transferred before the time listed above, use the following guidelines:
    - If the scheduled discharge or transfer date is within two weeks of the original designated ROP examination time, arrange for an ROP examination before discharge.
    - If the scheduled discharge or transfer date is more than two weeks before the original designated ROP examination time, recommend a date of the first exam either at the referring hospital or by an outpatient clinic visit on the ROP discharge form.

Timing of follow-up examinations

- No disease and gestational age at birth of ≤ 25 weeks
    - every week until 35 weeks PMA then every one to three weeks until mature
- No disease and gestational age at birth age of >25 weeks
    - every two weeks until vascularized into Zone III
- Mild disease (Stage 1 or Stage 2 in Zone II, without plus)
    - every week
- Mild stable disease (Stage 1 or Stage 2 in Zone II) and stable for four weeks
    - every one to two weeks
- Type 2 ROP Pre-Threshold
    - Zone I any stage; Zone 2
    - Stage 2; Stage 3 in Zone II or III without plus, Pre-Plus may be present
    - every 2-7 days until no longer Type 2 pre-threshold.
- Type 1 or Threshold ROP

    - Zone 1 any stage with plus disease
    - Stage 3 in Zone I, Stage 3 in Zone II or III with plus
    - treatment recommended within 72 hours with follow up weekly thereafter until regression.
- Regressing ROP and vascularized into Zone III
    - two to 8 weeks intervals until mature or meets other guidelines to stop screening (see below)
- The frequency of the follow-up depends upon the severity of the disease, zone of involvement, the presence or absence of plus disease, and the rate of progression noted from previous examinations.

Criteria to Stop ROP Screening

- Screening can stop when:
    - Retina is vascularized to ora serrata
    - Eyes that have been treated with Laser and the retina is vascularized to the treated area without persistent retinal disease
    - If PMA age is ≥ 54 weeks without Stage I or worse and vessels are within 2 Disc Diameters form the ora serrata in Zone 3 and have not been treated with anti-VEGF injections
- Eyes that have been treated with anti-VEGF injections should be followed until mature or laser treatment has been performed.
- If child is >54 weeks postmenstrual age and the retina is not vascularized to within 2 Disc Diameters of the ora serrata but there is no active ROP (i.e. Stage “0”), and the child is becoming to difficult to examine in clinic, an examination can be scheduled under anesthesia (EUA).
    - During the EUA, if a fluorescein angiography shows vascular leakage or other vascular abnormalities (shunt vessels, terminal bulbs, vascular tufts) retinal laser should be considered.
    - If no vascular leakage or high-risk vascular structures, follow-up every 6-12 months for routine eye exams clinic with wide-field photography as able.

Follow-up eye examinations after ROP screening ends

- All children with a history of ROP should have at least one follow-up examination between 9-12 months of age to rule out long-term eye problems.
- Eyes that have had treatment or have had moderate to severe ROP (stage 3 or worse) should be evaluated at least every year.

Resources

1. UIHC Guidelines

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