

Audit on retinopathy of prematurity screening

Erwin Chung Chen Tse Sak Kwun, Robert Taylor
York Teaching Hospital Foundation Trust

Background

- Sight threatening retinopathy of prematurity (ROP) is a proliferative disorder of the retinal vasculature affecting premature babies.
- If untreated, severe ROP can result in serious vision impairment.
- The goal of screening is to identify the more severe stages early enough to allow appropriate intervention.
- Guideline for ROP screening has been developed by Royal College of Paediatrics and Child Health in collaboration with Royal college of ophthalmology.

Methods

We collected the our data from Badger, a platform designed for the recording of all daily events within the unit. 86 infants admitted to SCBU between 01/03/14 to 29/02/16, eligible for ROP screening were identified on Badger. Two infants were excluded as they were deceased before being screened which gave a total of 84.

Case notes of infants who were recorded as late for their ROP screening were requested for analysis.

The documentation of ROP screening in some cases were difficult to find.

Purpose

The aims of the audit were to measure adherence on completeness of ROP screening programme and timing of first screening in premature babies.

Standards:

1. % of babies <32 weeks GA or <1501g birthweight who receive at least one ROP eye examination (100%)
2. % of babies < 27 weeks GA receiving a first ROP screening exam by 31 completed weeks postmenstrual age (95%)
3. % of babies 27 –32 weeks receiving a first ROP screening exam before 5 completed weeks postnatal age (95%)
4. % of babies >32 weeks but <1501g birthweight receiving a first ROP screening exam before 5 completed weeks postnatal age (95%)

Conclusion

- We found a lag in the recording on Badger and the actual ROP screening.
- A need for more accurate and effective recording of ROP screening test for eligible babies on Badger and case notes.
- No babies came to any harm as a result of late screening.

Recommendations:

Retinopathy of prematurity (ROP) screening

Date of first screening arranged :

INPATIENT	OUTPATIENT
-----------	------------

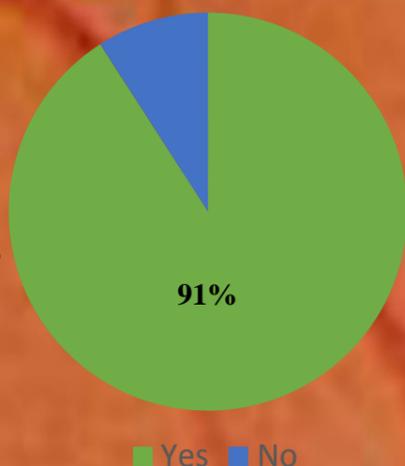
Screening performed on :

1. Implementation of a sticker system on cover of patients' notes to prompt nursing staffs and clinicians to document ROP screening in case notes and to ensure screening is arranged on time.
2. Ophthalmologists to access badger for recording of ROP screening in real time to avoid existing lag.
3. Re-audit in 6 months to evaluate interventions.

Results

1. **100%** of babies <32 weeks gestational age or <1501g birthweight received at least one ROP eye examination
2. Babies < 27 weeks gestational age receiving a first ROP screening exam by 31 completed weeks postmenstrual age, *n=11*

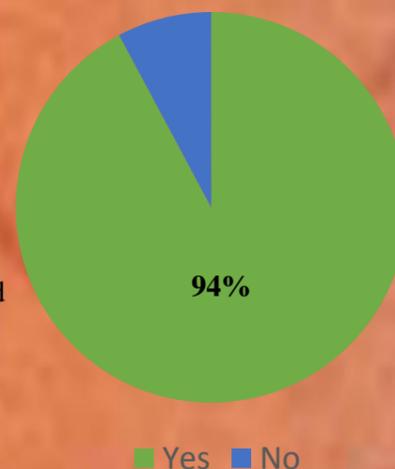
One baby (9%) was screened late by 5 days at a different hospital.



3. Babies 27 –32 weeks receiving a first ROP screening exam before 5 completed weeks postnatal age , *n=64*

Four babies (6%) were screened late by 1,2,3 and 13 days.

The baby delayed by 13 days was transferred to the unit already late for screening.



4. **100%** of babies >32 weeks but <1501g birthweight received a first ROP screening exam before 5 completed weeks postnatal age