

# Digital imaging-based screening can cut ROP exams

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(HealthDay)—Digital imaging-based retinopathy of prematurity (ROP) detection strategies can reduce the number of ROP examinations per infant, according to a study published online Dec. 15 in *Pediatrics*.

Alex R. Kemper, M.D., M.P.H., from the Duke Clinical Research Institute in Durham, N.C., and colleagues compared digital imaging-based ROP detection strategies with serial ROP examinations in an individual level microsimulation study of a hypothetical cohort of 650 [infants](#) (gestational age, 23 to 30 weeks). Strategies based on indirect ophthalmoscopy or digital imaging, beginning at 32 weeks' postmenstrual age (PMA) and continuing to discharge, transfer, or 40 weeks' PMA were used to evaluate infants.

The researchers found that the strategy of ROP examinations identified

45.8 cases of type 1 ROP by discharge, transfer, or 40 weeks' PMA; an additional 1.9 cases were identified in infants recommended for later follow-up. All 47.7 cases of type 1 ROP were identified with digital imaging with an ROP examination at discharge. Overall, 1,745.7 ROP examinations were required with the ROP examination-only strategy compared with 1,065.5 ROP examinations and 1,786.2 digital imaging sessions with the digital imaging with a discharge examination.

"Although digital imaging decreased the number of ROP examinations per infant, there was an increase in the total number of interventions (i.e., ROP examinations and imaging sessions)," the authors write. "Providing an ROP examination at the time of neonatal intensive care unit discharge can significantly reduce the number of infants who require follow-up."

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