

More infants surviving pre-term births results in higher rates of eye problems

October 12 2009

As more extremely pre-term infants survive in Sweden, an increasing number of babies are experiencing vision problems caused by abnormalities involving the retina, according to a report in the October issue of *Archives of Ophthalmology*.

"[Retinopathy](#) of prematurity [abnormal development of blood vessels in the retina] remains an important cause of [childhood blindness](#) and [visual impairment](#) throughout the world," the authors write as background information in the article. "During the last decade, neonatal care has changed with an increase in centralization, implementation of new therapies and provision of intensive care for infants of extremely low gestational age. These changes have contributed to an increasing population of survivors in neonatal intensive care units today. The incidence of retinopathy of prematurity in these extremely preterm infants is, therefore, unknown."

Dordi Austeng, M.D., of University Hospital, Uppsala, Sweden, and Trondheim University Hospital, Trondheim, Norway, and colleagues studied Swedish infants born before 27 weeks' gestation between 2004 and 2007. Infants were screened for retinopathy of prematurity beginning at five weeks after birth and were treated for the condition according to established guidelines.

During the study, 506 of 707 infants survived until the first [eye](#) examination. Of these, 368 (72.7 percent) had retinopathy of prematurity, including 37.9 percent with mild cases and 34.8 percent

whose condition was severe. A total of 99 (19.6 percent) were treated.

Gestational age was more closely associated with the development of retinopathy of prematurity than was birth weight. "The incidence was reduced from 100 percent in the five infants born at 22 weeks' gestation to 56 percent in those born at 26 completed weeks," the authors write. "In addition, the risk of retinopathy of prematurity declined by 50 percent for each week of gestational age at birth in the cohort."

Direct comparisons with previous studies are difficult, but most have found much lower incidences of severe retinopathy of prematurity, the authors note. For instance, a Belgian study reported a 25.5 percent incidence among infants born before 27 weeks' gestation and an Austrian study observed a 16 percent lower rate, compared with the 34.8 percent incidence in the current findings.

"The higher incidence of retinopathy of prematurity in the present study may be because of the higher proportion of infants born in the earliest weeks of gestation (i.e., 11.5 percent of infants in weeks 22 to 23 vs. 0 percent to 6 percent in the other studies)," the authors write. "These extremely premature infants, who previously did not survive, are probably especially vulnerable and prone to develop complications such as retinopathy of [prematurity](#)."

More information: Arch Ophthalmol. 2009;127[10]1315-1319

Source: JAMA and Archives Journals ([news](#) : [web](#))

Citation: More infants surviving pre-term births results in higher rates of eye problems (2009, October 12) retrieved 8 May 2024 from <https://medicalxpress.com/news/2009-10-infants-surviving-pre-term-births-results.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.