Risk of Retinal Detachment After Pediatric Cataract Surgery

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Retinal detachment (RD) is a rare but well-recognized complication of congenital cataract surgery and the vitrectomy that often accompanies it. While some retinal detachments occur soon after surgery, the delay between surgery and detachment can be 20 years or more.

In the current issue of IOVS, Haargaard et al.1 used a population-based design to calculate the long-term risk of RD after cataract surgery in children. They analyzed a cohort of 656 children (1043 eyes) operated for cataract in a national registry. Exclusion criteria were trauma, uveitis, and any systemic disease known to be associated with RD. This is a unique cohort of patients, made possible by the long tradition of case registration in Denmark and the ability to track outcomes in these children over a long period of time.

Overall, the RD rate for children operated for cataracts was calculated to be 3% within the first 20 years after surgery. The time between cataract surgery and development of RD was 9.1 years (25th quartile, 5.2 and 75th quartile, 16.9 years). Among those with RD, the most significant risk factor was the presence of mental retardation. In this subset, the operated children had more than a 7-fold increase in RD reaching nearly one child in four.

Retinal detachment occurring years after pediatric cataract surgery may be due to a combination of many factors: persistent long-term vitreoretinal traction, premature vitreous syneresis leading to premature posterior vitreous detachment, and repeated trauma. The finding that mental retardation increases the RD risk dramatically points out the need for closer and longer follow-up in these patients, well into adulthood. The need for this follow-up, including serial examination under anesthesia if needed, should be discussed thoroughly at the time of the initial cataract surgery.

References