

## **Strabismus surgery outcomes in the Infant Aphakia Treatment Study (IATS) at age 5 years.**

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### **Abstract**

#### **PURPOSE:**

To report strabismus surgery frequency and outcomes after monocular infantile cataract surgery with or without IOL implantation.

#### **METHODS:**

The Infant Aphakia Treatment Study (IATS) is a randomized, multicenter clinical trial comparing treatment of aphakia with a primary IOL or contact lens in 114 infants with a unilateral congenital cataract. This report is a secondary outcome analysis of ocular motor data from IATS patients who underwent strabismus surgery prior to age 5 years.

#### **RESULTS:**

Strabismus surgery was performed in 45 (39%) patients (contact lens group [CL], 37%; IOL group, 42% [P = 0.70]). The indications for strabismus surgery were esotropia (62%), exotropia (33%), and hypertropia (4%). Infants who underwent cataract surgery at a younger age were less likely to undergo strabismus surgery (28-48 days, 12/50 [24%]; 49-210 days, 33/64 [52%]; P = 0.0037). Of the 42 patients who underwent strabismus surgery, 14 (33%) had a postoperative distance alignment within 8<sup>Δ</sup> of orthotropia at age 5 years. The 5-year visual acuity of children with strabismus was the same whether or not strabismus surgery had been performed (1.10 logMAR with surgery vs 1.00 without [P = 0.71]).

#### **CONCLUSIONS:**

In this study cohort, cataract surgery performed in the first 6 weeks of life was associated with a reduced frequency of strabismus surgery. Strabismus surgery outcomes in this population are guarded. Surgical improvement of strabismus does not appear to influence long-term visual acuity.