

Retinal perforation in strabismus surgery.

[Noel LP](#), [Bloom JN](#), [Clarke WN](#), [Bawazeer A](#).

Children's Hospital of Eastern Ontario, Department of Ophthalmology, Canada.

Abstract

PURPOSE: Perforation of the retina is a major complication of strabismus surgery. The reported incidence of perforation varies from 0.13% to 12%. This study was undertaken to determine, from a large collaborative database, the incidence of suspected and unsuspected retinal and choroidal injury in pediatric horizontal muscle surgery.

METHOD: All children with horizontal strabismus surgery seen between September 1992 and October 1995 were examined with Indirect ophthalmoscopy immediately following their procedure. Surgery was performed by both resident and attending physicians. Cases involving muscle reoperation, high myopia, or patients with connective tissue disorders were excluded.

RESULTS: Strabismus surgery was performed on 765 patients, who underwent 1129 muscle recessions and 349 muscle resections. These children also had 161 vertical or oblique muscle procedures performed. Intraocular trauma resulting from horizontal muscle surgery was noted in 14 patient, including three retinal perforations. One of these patients was treated with cryotherapy; the other two received no therapy other than intraoperative and postoperative antibiotics.

DISCUSSION: The incidence of retinal perforation was 0.4% and the incidence of choroidal injury without perforation was 1.4% in this large series of children undergoing horizontal strabismus surgery. Retinal detachment or endophthalmitis did not develop during the 6-week follow-up period.