findings and visual acuities over nine and 13 years, and our main message is the favorable outlook for good visual acuity in these patients.

ELIAS I. TRABOULSI, M.D.
JOHN F. O'NEILL, M.D.
Washington, D.C.
IRENE H. MAUMENEE, M.D.
Baltimore, Maryland

#30

Congenital Idiopathic Microcoria

EDITOR:

In the article "Congenital idiopathic microcoria," by Scott R. Lambert, Luis Amaya, and David Taylor (Am. J. Ophthalmol. 106:590, November 1988), the authors describe a condition we described in three genetically unrelated patients at the Hermann Eye Center Alumni Annual Meeting in June 1988. The condition was named dysgenetic acropupillary membrane.

We agree with the pathogenesis proposed by the authors, namely contracture at the pupillary margin of fibrous material derived from remnants of the tunica vasculosa lentis or of anomalous neural crest cells. However, their therapeutic recommendations, to treat the condition with the same urgency as dense monocular cataracts, seems an overstatement. While a small pupil limits best-corrected visual acuity because of diffraction, a 0.5-mm diameter pupil typically allows a visual acuity of 20/40 and a 1-mm pupil allows 20/20.[1] Therefore, only in extreme reductions in pupillary diameter should surgery be considered. In any case, their management of Case 4 did not follow their own recommendation.

While some illustrations were mismatched with the text, their Patients 1, 2, 4, and 5 must have associated anomalies responsible for a visual acuity of light perception, since the preoperative size of their pupils allows much better visual acuities.[1] Amblyopia in their Case 2 might well be the result of the long-standing uncorrected strabismus that occurred during the amblyogenic period. No persistent pupillary membranes were seen in their Case 3, which appears to be an unrelated case of corectopia with congenital severe myopia and anisometropic amblyopia. While their Cases 3 and 5 may be considered manifestations of ectopia lentis et pupillae,[2] the markedly eccentric pupil in Case 5 might cause significant radial and irregular astigmatism, which is not correctable with spherocylinders[3] and might thus represent an appropriate indication for surgery. Loss of the red reflex does not represent a valid indication for surgery. Ocular pigmentation, intensity and degree of coaxiality of the incident light, distance of examination, and other factors play important roles in the red reflex.[4] The red reflex may be absent in the presence of pupils consistent with good visual acuities.[1,4] Although reduced vision often results from causes other than small pupils, conservative management is usually adequate for the isolated microcoria.

ANTONIO A. VILA-CORO, M.D.
MALCOLM L. MAZOW, M.D.
JACK T. HOLLADAY, M.D.
LOUISE C. KALDIS, M.D.
JEFFREY B. ARNOULT, M.D.
Houston, Texas

References

1. Campbell, C. J.: Physiological Optics. Hagerstown, Md., Harper and Row, 1974, p. 202.
2. Goldberg, M. F.: Clinical manifestations of ectopia lentis et pupillae in 16 patients. Ophthalmology 95:1080, 1988.
3. Cogger, T. J.: Correction with hard contact lenses. In Duane, T. (ed.): Clinical Ophthalmology. Hagerstown, Md., Harper and Row, 1979, vol. 1, chap. 54, p. 16.
4. Roe, L. D., and Guyton, D. L.: The light that leaks. Brueckner and the red reflex. Surv. Ophthalmol. 28:665, 1984.

Reply

EDITOR:

We are pleased that Vila-Coro and associates have also examined three patients with congenital idiopathic microcoria and that they concur with the pathogenesis we proposed. One of us (L.A.) recently examined another child with this condition as well. We agree that surgery should only be performed if the