Consecutive Esotropia Following Surgery for Intermittent Exotropia

It is often said that if you are not getting some overcorrections that result in consecutive esotropias in patients you have operated on for intermittent exotropia, your graded recessions may be of too small magnitude. Insufficient lateral rectus muscle recessions in these cases will frequently result in undercorrections and recurrence of exotropia. The goal, of course, is to perform sufficient surgery to produce a transient postoperative esotropia that results in long-term orthophoria with at least good stereopsis at near fixation. The precise amount of desirable overcorrection varies among clinicians, but most believe that overcorrection should not exceed 20 prism diopters. In their classic publication, Raab and Parks reported that an overcorrection of at least 17 prism diopters immediately after surgery is a risk factor for consecutive esotropia. Factors associated with overcorrections include high accommodative convergence to accommodation ratio, lateral incomitancy, and younger age at surgery. A small angle of esodeviation during the early postoperative period usually regresses by conservative management within 2 to 3 weeks, and the recurrence rate is low.

In the study by Choi et al. in this issue, patients with a larger esodeviation at 1 month postoperatively frequently proceeded to secondary surgery. The authors’ findings are useful for predicting the requirement for surgery during the early period and for determining a treatment strategy. Occlusion therapy, correction of hyperopia, prism therapy, and even phospholine iodide pharmacologic therapy have been used with varying degrees of success in the management of consecutive esotropia. It is interesting that many of the patients undergoing bilateral lateral rectus recessions in this study had the basic type of intermittent exotropia. I would have expected fewer overcorrections in this group, but that was not the case.

Overcorrections are a part of strabismus surgery that will always occur because it is not an exact science. Nevertheless, it is important to perform surgery after obtaining accurate, reproducible measurements of the angle of deviation in these patients. This may not always be possible in very young patients and the inability to obtain accurate preoperative measurements in all fields of gaze probably accounts for less than optimal results in this age group. Because most of these children have at least intermittent binocularity, it may be prudent to delay surgery until you are confident in your measurements.

REFERENCE


Rudolph S. Wagner, MD
Editor

Dr. Wagner is on the speaker’s bureau of Alcon Laboratories.
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