For the most part, the techniques used in strabismus surgery have not changed over the years. Most are variations of recessions and resections of the rectus and oblique muscles. Certainly advances have been made, most notably the use of adjustable sutures and anteriorization of the inferior oblique muscles. These operations are now part of the accepted surgical armamentarium. What has changed, however, is the more scientific approach we use in planning and performing surgery. For example, we have the ability to use ophthalmic imaging tools such as magnetic resonance imaging (MRI) and ultrasonography to help plan surgical procedures.

A subject that has stimulated great debate and discussion among strabismus surgeons is the active pulley hypothesis. Evidence exists that connective tissue structures or pulleys influence the function and control of the rectus muscles. The interpretation of the MRI and histologic evidence that support this hypothesis is questioned by some. The fact that many surgeons continue to have success using surgical techniques that do not consider the presence of connective tissue pulley-like structure has led some ophthalmologists to deny or downplay the importance of this theory.

This issue of the Journal of Pediatric Ophthalmology & Strabismus contains contrasting articles that provide readers with evidence for and against extraocular muscle pulleys. Dr. Joseph Demer has invested a great deal of time and effort studying various extraocular muscle disorders using orbital MRI and other investigational devices. He reviews the work that has resulted in his formulating the active pulley hypothesis. Dr. Robert S. Jampel presents his findings in which he does not recognize pulleys or planes splitting the extraocular muscles on interpreting MRI studies. Readers should carefully consider these two articles and draw their own conclusions regarding this important subject. I commend the authors for being willing to provide this information expeditiously.

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Editor