

## **New approaches to severe incyclotorsion induced by macular translocation surgery**

*Author: Jonathan M. Holmes, Colin A. McCannel – Department of Ophthalmology, Mayo Clinic, Rochester MN USA*

### **Purpose:**

Macular translocation with a 360 degree retinectomy (MT360) is a surgical treatment for exudative age related macular degeneration. Visual rehabilitation following such surgery involves addressing tilting of the visual environment and torsional diplopia. Previously reported strabismus approaches include advancement of the inferior oblique to the lateral border of the superior rectus, combined with superior oblique tenotomy, with and without horizontal rectus transposition. Nevertheless, torsion in excess of 50 degrees is often undercorrected by this approach.

### **Methods:**

We report cases following MT360 that had up to 60 degrees of incyclotorsion. The incyclotorsion was managed either with the addition of a resection of the transposed inferior oblique to the standard oblique and rectus surgery, or, if undercorrected by the previous oblique and rectus surgery, resection of the already transposed inferior oblique and resection of the transposed medial rectus.

### **Results:**

Incorporating resections of inferior oblique and horizontal rectus muscles allowed correction of up to 60 degrees of incyclotorsion following MT360 surgery.

### **Conclusion:**

Cases of particularly severe incyclotorsion induced by MT360 for exudative macular degeneration can be addressed by modifying the strabismus surgery approach, adding resections of the transposed inferior oblique and medial rectus.

### **Take-home message:**

Resection of the transposed inferior oblique and horizontal rectii should be considered in addition to more standard oblique and rectus muscle surgery in cases of severe incyclotorsion following macular translocation.

