Surgical Management of Esotropia with High Myopia

Andrea Molinari, M.D.
Hospital Metropolitano
Quito - Ecuador
Case presentation

- 38 y, female
- VA: count fingers at 10 cm due to dense bilateral cataracts.
- Referred by anterior segment surgeon due to the difficulty to perform cataract surgery
- 4 abduction RE

- 8 abduction LE

No elevation!!
What axial length do you estimate in the eyes of this patient?

1. 24 - 28 mm
2. 29 - 32 mm
3. 33 - 36 mm
4. > 36 mm
Axial Length
OD: 37 mm
OS: 38 mm
In a coronal cut of an orbital image where would you expect to find the EOM’s?

1. SR nasally displaced
2. LR inferiorly displaced and IR temporal displaced
3. LR inferiorly displaced and SR nasally displaced
4. LR inferiorly displaced
Which surgical technique would you choose?

- Repositioning of the LR (Krzizok)
- Yamada
- Yokoyama
- Partial Jensen
- R-R plus myoscleropexy
Surgical techniques in ET with Progressive Myopia

- **Repositioning the lateral rectus path.**

- **Yamada technique**

- **Yokoyama technique**

- **Partial Jensen**

- **Recess-Resect plus myoscleropexy ia del recto lateral**
Repositioning the lateral rectus path (Krzizok)

New approach in strabismus surgery in high myopia

Thomas H Krzizok, Herbert Kaufmann, Horst Traupe
Yamada Technique

- Hemitransposition of superior rectus and lateral rectus 7 mm from limbus.

Rectus Eye Muscle Paths After Surgical Correction of Convergent Strabismus Fixus
Masakazu Yamada, MD, Sayuri Taniguchi, OD, Tomomi Muroi, OD, Shingo Satofuka, MD, and Sachiko Nishina, MD

Surgical Procedure for Correcting Globe Dislocation in Highly Myopic Strabismus

MAKOTO YAMAGUCHI, TSURANU YOKOYAMA, AND KUNIHKO SHIRAKI

Am J Ophthalmol 2010; 149:341-346
Partial Jensen’s Procedure for the Treatment of Myopic Strabismus Fixus

Peter C. Larsen, MBBS,a and Glen A. Gole, MD, FRANZCOb

Journal of AAPOS
Volume 8 Number 4 August 2004
The efficacy of the R/R improves with the myoscleropexy
Efficacy is larger in unilateral cases
Would you add a weakening procedure of the MR?

1. Yes

2. No
Free myectomy of the MR
Forced duction test to abduction

BEFORE MYECTOMY

AFTER MYECTOMY
SURGERY:
free myectomy MR OD 6mm OS 8mm
BE: Jensen 1/3 of LR and SR
Preoperatory

Postoperatory 10 PD residual ET
Repositioning the muscle paths by the different techniques will help improving ocular alignment in these patients.

Medial rectus weakening is not necessary in all patients but should be performed if the medials are tight on forced duction test.

A thorough eye examination and imaging of the patient before surgery will be useful for choosing the surgical strategy.
Thank you
Strabismus associated to foveal ectopia

Andrea Molinari M.D.
Hospital Metropolitano
Quito - Ecuador
Atypical forms of Strabismus
Foveal Ectopia

Congenital
- Chorioretinal Coloboma
- FEVR
- Norrie’s disease

Early acquired
- ROP
- Chorioretinal scars

Acquired
- Macular translocation
- Surgery
- Trauma
Retinal coloboma
Familial exudative Vitreoretinopathy
Norrie’s disease
Chorioretinal scars

ET 10 PD

VA 20/40

Strabismus

Amblyopia
Macular translocation surgery
ROP

Nasal Dragging

Temporal Dragging
Nasal Dragging

Temporal Dragging

Pseudoesotropia

Pseudoexotropia

70 XT

25 ET
Born full term  
krimsky  35 et  
bcva OD: 20/40  
Os:  20/20  
cover test  Rht  45 pd

she had a previous right inferior oblique weakening procedure for a RHT of 12 pd
Foveal ectopias induce atypical forms of strabismus.

There are many different causes that can produce a foveal ectopia.

The presence of strabismus and amblyopia are very common.

Nasal dragging will produce pseudoesotropia and temporal dragging will produce pseudoexotropia.

SURGICAL RESULTS ARE UNPREDICTABLE
Thank you