REVISTA DE ESTRABISMO & OFTALMOLOGIA PEDIATRICA

REOP

AND

WSPOS

World Society of Paediatric Ophthalmology and Strabismus

CASE 5

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A 46 year old woman presented with a complaint of diplopia with inward deviation of her right eye on alternate days for the past 3 years.

Neurological and general health workup were negative

She had a history of high myopia since childhood in both eyes.

She had been wearing rigid contact lenses since 15 years old.

Examination

Best corrected visual acuity:
OD: 1.0
OS: 1.0

Eyeglasses and refraction:
OD: -16.00 + 0.50 axis 85°
OS: - 14.75 + 0.75 axis 180°

Refraction with contact lenses:
OD: plano 1.0
OS: plano 1.0

Examination

Adnexa, pupillary reflex & slit lamp: unremarkable

Fundus: myopic degenerative changes

Axial length by ultrasound biometry:

RE: 34mm

LE: 33mm

Examination

Esotropia with preference by left eye at distance and near .

Prism and alternate cover testing with left eye fixing at distance and near:

ET 45 Δ

ET 50 Δ ET 45 Δ ET 50 Δ

ET 50 Δ

Fusion with prism

Ocular rotation: unremarkable

Preoperative: “strabismic” day

Examination on “straight” day

No complaint of diplopia and deviation.

ET 10 $^{\Delta}$ of the right eye.

Titmus: 100″.

Surgery # 1

Six months following the first examination, diplopia and deviation intensified (daily events), and surgery was indicated.

Exploration under general anesthesia:

RLR path deviated inferiorly

RSR path deviated medially

Forced duction test negative

Surgery # 1

Procedure:

Recession of RMR by 6mm

Lateral hemitransposition of the RSR and suture at 7mm posterior to the limbus

Superior hemitransposition of the RLR and suture at 7mm posterior from the limbus

PO status - 3 month follow up

Postoperative follow up:

No diplopia and deviation for the first 3 months.

She noticed a progressive recurrence of diplopia and deviation after 3 months.

One year after surgery the measurements were the same as those when she presented preoperatively.

Surgery # 2

Left eye exploration:

LR path not deviated

Recession LMR 7mm

Resection LLR 9mm

Surgery # 2

Postoperative follow up:

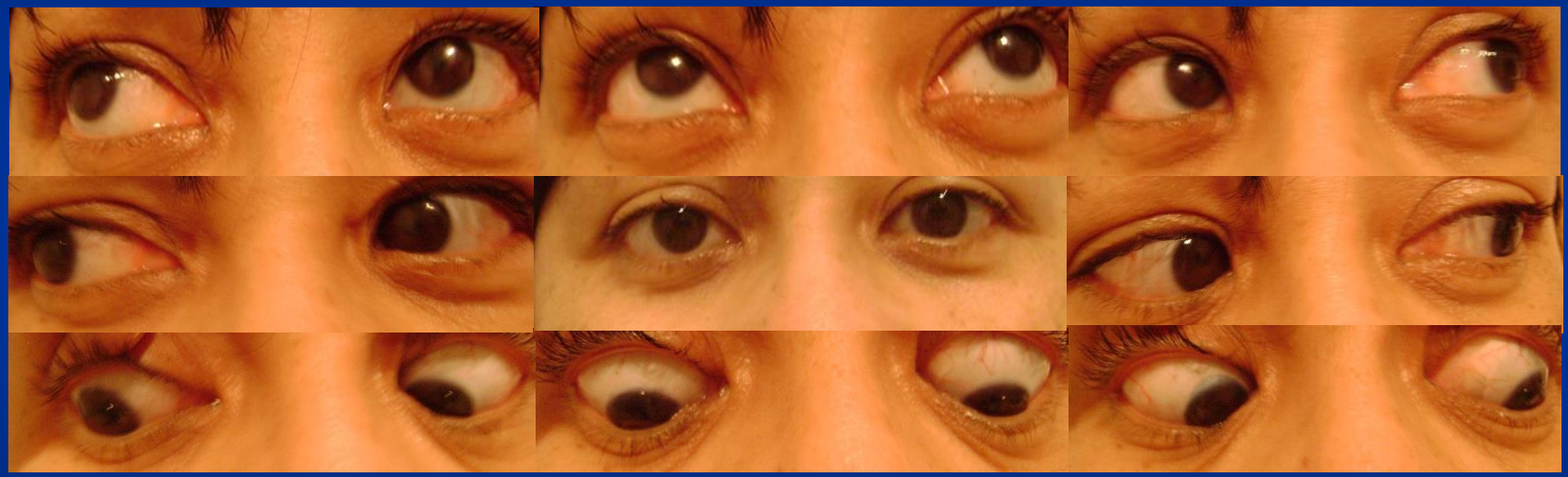
No complaints after 2 years

Orthotropic

Titmus: 100”

Surgery # 2

Postoperative status



What would you do in such a case?

1) Which eye would you operate on?

a) The non-dominant eye

b) Both eyes

2) Do you feel recommending orbital image studies prior to the surgical procedures in highly myopic strabismus is:

a) Indispensable

b) Useful but not indispensable

c) I would not recommend prior image studies because muscle path found at surgery is the key to the surgical plan

3) Which approach would you choose in a downward shift lateral rectus (LR) muscle in cases with no vertical deviation?

a) Resection or plication of the LR

b) Repositioning the LR muscle belly by a myoscleropexia

c) Resection with myoscleropexia of the LR

d) Harada technique

e) Yokoyama technique

f) Other

Could our Experts please answer the following Questions in Addition to Answering the Questions on the previous slide?

1. Assuming this strabismus is caused by mechanical factors, how would you explain the cyclic presentation?

2. Could you please let us know whether or not you feel there would be a conflict between different pathogenic theories & could you give us an explanation for the same?

THANK YOU