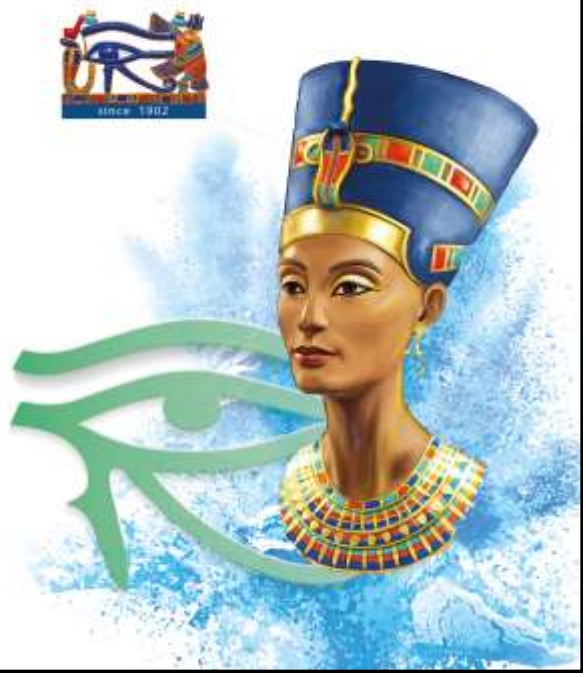
المؤتمر السنوي الدولي للجمعية الرمدية المصرية
INTERNATIONAL CONGRESS OF THE
EGYPTIAN OPHTHALMOLOGICAL SOCIETY
EOS 2023

Anti-elevation $

By Doaa Elfadaly

Lecturer Ophthalmology, Minia University
MSc, MD, FRCS, FRCOphth



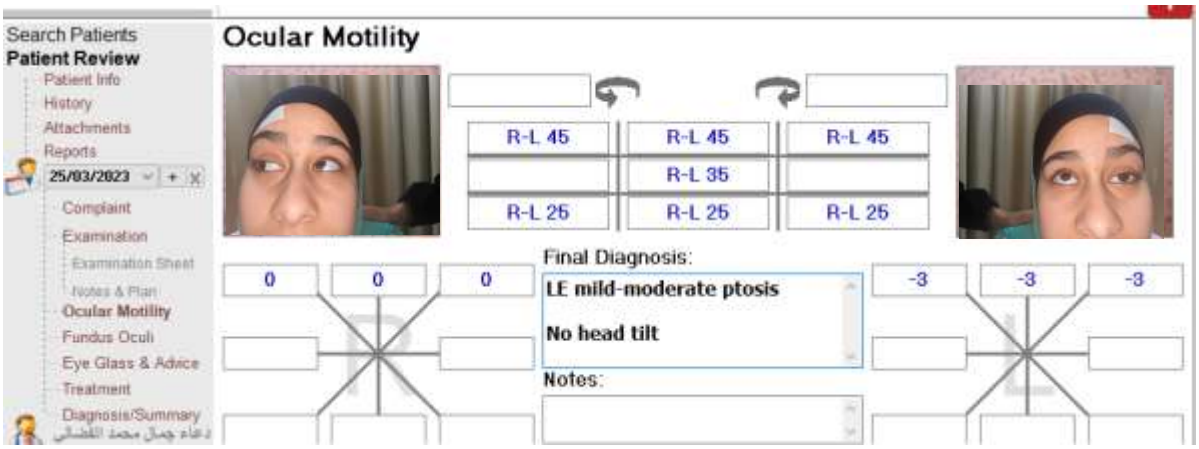
1

- 19 years old
- Had history of squint surgery in LE

	RE	LE
BDCVA	1.0 (Decimal)	1.0 (Decimal)
Ant segment	Normal	Normal
Fundus	Normal	Normal

EOS 2023

2



3



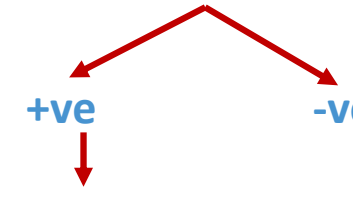



Left hypotropia 35 PD, with -3 limitation upgaze LE

4

Plan

- She mentioned that has what looks like DVD LE
- Didn't know the Sx (although good surgeon)
- My initial plan > perform FDT



IR R--

SR advancement

(assuming first sx was SRR--)

EOS 2023

5

Intraoperative

- FDT > +ve
- Explored IR >> has she undergone IR+?
- But it was intact (untouched)
- Muscle band next to temporal border

EOS 2023

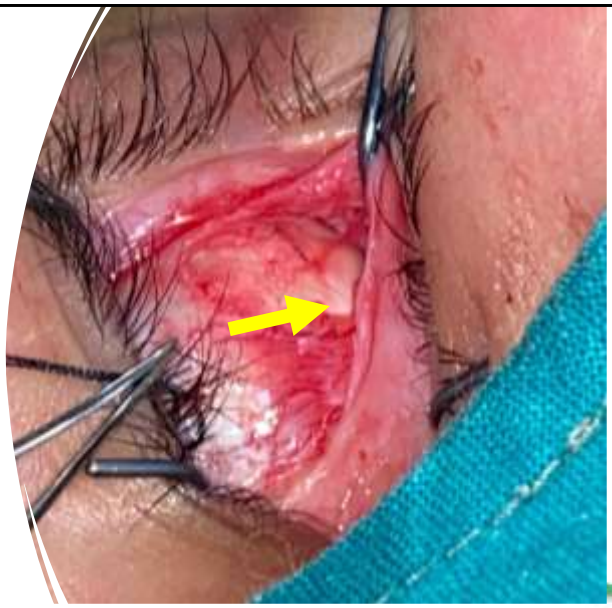
6

This muscle was Inferior Oblique

So initial surgery was **IOAT**

IO disinsertion, relieved all fibrosis around this area

FDT was -ve



EOS 2023

7

DD

- Anti-elevation Syndrome
- Fat adherence syndrome

EOS 2023

8

Anti-elevation Syndrome

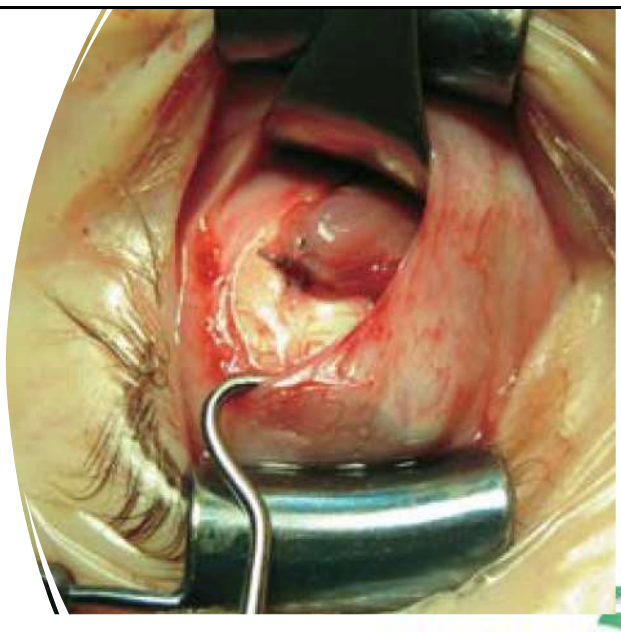
- In 1978, Scott proposed the concept of IOAT
- IO anteriorized to the level of IR (IO from elevation > depression)
- Since then, IOAT has been used for correction of IOOA and treatment of DVD or SOP.
- A technique that shortens the distance between the origin and the insertion of the inferior oblique muscle. Thus, it weakens the elevation and abduction, endowing an **anti-elevation** function.

EOS 2023

9

Mechanism

- Stager argued that the **Ant IO >depressor** > transposition **posterior fibers** to the depressor **(IR).**
- Kushner on the other hand, argued **that upon upgaze**, the IO is not transpositioned to the depressor, **but rather limits elevation**



EOS 2023

10

Literature

- Mims and Wood reported antielevation syndrome in **14** /123 patients (after bilateral IOAT) and **2 / 77** patients by Kushner.
- Unilateral IOAT can result in Pseudo IOOA of the contralateral eye

(by stimulating the YOLK muscle in contralateral eye by hering's law)

- This phenomenon is more remarkable the more anterior the IO is located to the equator

11

Fat adherence $

- Hypotropia
- limitation of elevation
- positive FDT

12

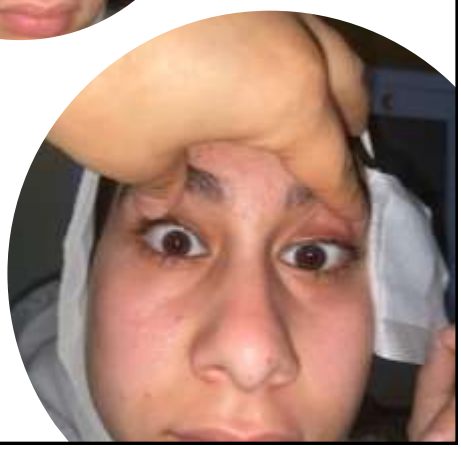
After IO disinsertion

Still hypotropia around 20 PD

13

Had IR recession 4mm

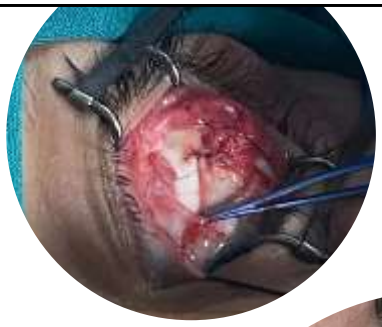
- Hypotropia improved to 15 PD
- Still cosmetically unaccepted

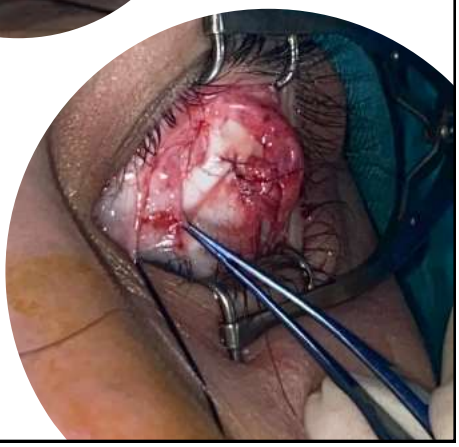


14

Single horizontal m transposition

- Lateral rectus upward transposition





15

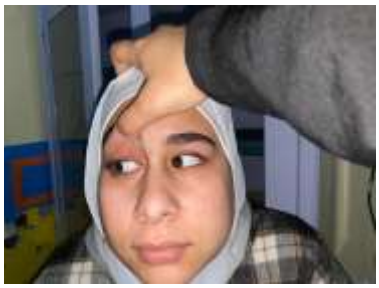
Few weeks later

- XT in PP
- Still hypotropic

EOS 2023

16

Few months later>>Orthophoria in PP



17

Conclusion

- There aren't many literature for treatment
- **Prevention** seems to be the most appropriate way in management
- Tips:

1. **Avoid spreading**
2. **Avoid** IOAT >**1 mm**
3. **Graded IOAT**
4. **Y splitting** (where the ant fibres 2 mm, NFVB 6 mm)

18


EOS 1902
THANK YOU
See you next year
المؤتمر السنوي الدولي للجمعية الرمدية المصرية
INTERNATIONAL CONGRESS OF THE
EGYPTIAN
OPHTHALMOLOGICAL SOCIETY
EOS 2024
24-26 APRIL 2024
InterContinental Citystars, Cairo, Egypt

19