




M-flex multifocal IOL: 1.5-year follow-up



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"I have no financial interest in any of the products mentioned in this presentation"



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Multifocal Lenses: the rationale

Multifocal versus Monofocal Intraocular Lenses in Cataract Surgery

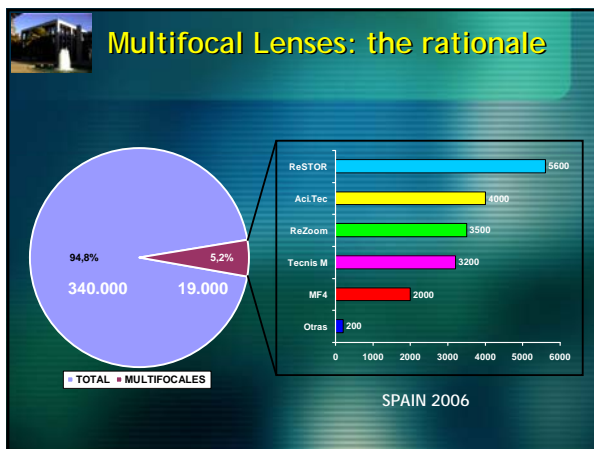
A Systematic Review

Martin Leyland, BSc, FRCOphth,¹ Eduardo Zinicola, MD²

Conclusions: Multifocal IOLs are effective at improving near vision relative to monofocal IOLs. Whether that improvement outweighs the adverse effects of multifocal IOLs will vary between patients, with motivation to achieve spectacle independence likely to be the deciding factor. *Ophthalmology* 2003;110:1789-1798 © 2003 by the American Academy of Ophthalmology.

Spain 2006:
19.000 multifocal IOLs / 340.000 implants (5,2%)

2007: 62.000 multifocal IOLs (12%)



M-flex 630F (Rayner)

april 2006: first implantation in Spain



7º CURSO
CIRUGIA REFRACTIVA
con enfoque en cirugía
20, 21, 22 Abril, 2006
Director Dr. Julián Cezón

M-flex 630F GENERAL SPECIFICATIONS

- Rayacryl hydrophilic acrylic: -high biocompatibility
-low PCO
-low silicone oil adherence
- Amon-Apple Enhanced Square Edge
- AVH Technology: -perfect centration and stability
- Optic: 6,25 mm.
- Length: 12,50 mm.
- Multi-zoned **aspheric** optic technology
- Additional power: +3.0 d. at the IOL plane
- Base power: +15.0 d. to + 23.0 d. in 0.5 d. increments
- One single use soft-tipped injector.

M-flex™ (630F)

D: distance
N: near

M-flex vs AmoArray vs REZOOM FOCUSING ZONES

zones	AmoArray	Rezoom	M-flex
1	0-2.1	0-2.1	0-1.75
2	2.1-3.4	2.1-3.4	1.75-2.8
3	3.4-3.9	3.4-4.3	2.8-4.1
4	3.9-4.6	4.3-4.6	4.1-5.0
5	4.6-4.7	4.6-4.7	5.0-5.75

24 H. POSTOP.

M-flex and M-flex-T

apr. 2006-nov. 2007: 61 eyes of 43 patients

age: 65 years (from 51 to 86)

sex: female/male:36/7

pre SR equiv: mean 1,47 D ± 1,37 D (from -0,13 to 3,75)
 pre SR sph: mean 2,11 D ± 1,28 D (from 0,50 to 4,00)
 pre SR cyl: mean -1,27 D ± 1,08 D (from -3,50 to -0,25)

Four groups: A n=44(630F+3), B n=10(630N+4), C n=1(630F+4), D n=6(MflexT)

Patient selection...


ZONES OF VISION

- ZONE 1(12-20 in)
Newsprint
Phone book
Maps
Sewing
- ZONE 2 (2-4 feet)
Headlines
Computer
Menus
Price tags
- ZONE 3 (6-20 ft.)
Indoors
TV
Cooking
Cleaning
- ZONE 4 (20-100 ft.)
Day-far
Driving
Golf
Road signs
- ZONE 5 (100 ft.-∞)
Night-far
Night driving
Movies
Star gazing

GROUP A: Zones 1,2,3 **GROUP B:** Zones 2,3,4 **GROUP C:** Zones 3,4,5


Patient information and education

" The lens will require an adjustment period. This period is usually complete within 6 to 12 weeks. Like all multifocal lenses **MOST people report halos or glare around lights**. This diminishes over time. For some, it becomes less troublesome but never completely goes away. **MOST people report that the ability to see near and far outweighs any visual side effects associated with the lens**"



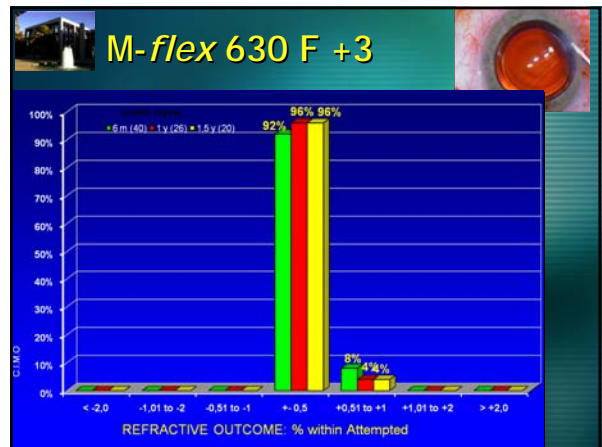
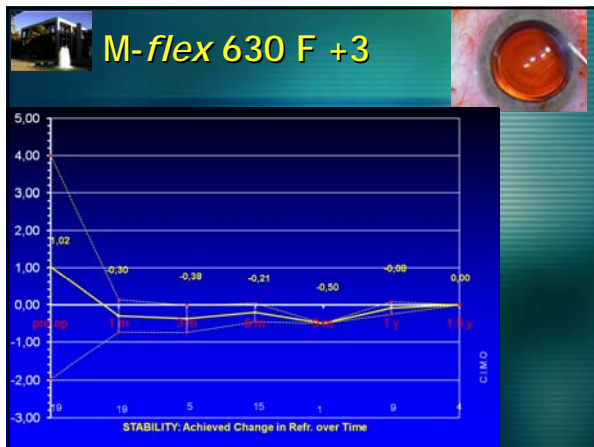
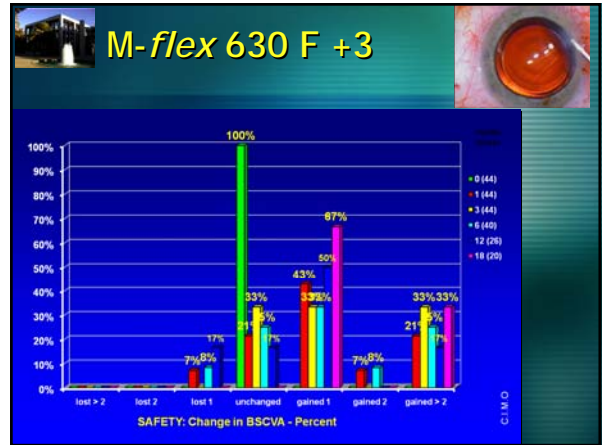
Identification of inadequate patients for multifocal lens implantation

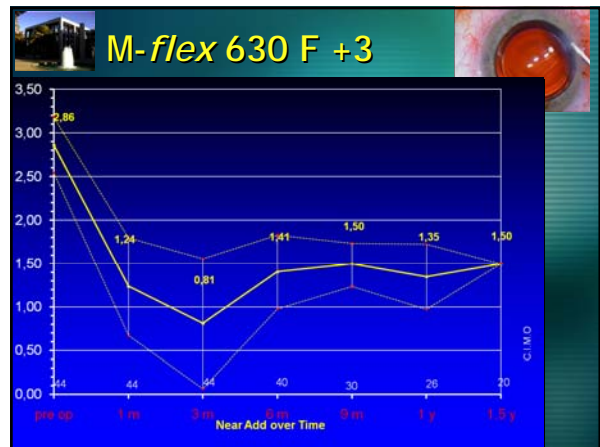
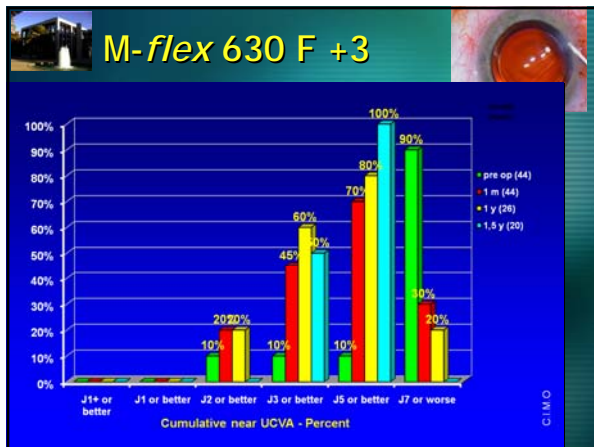
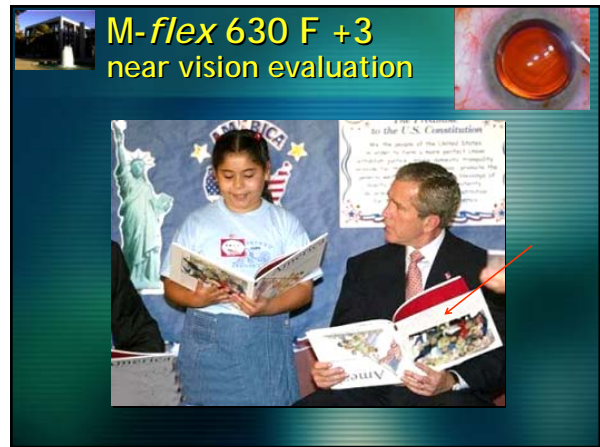
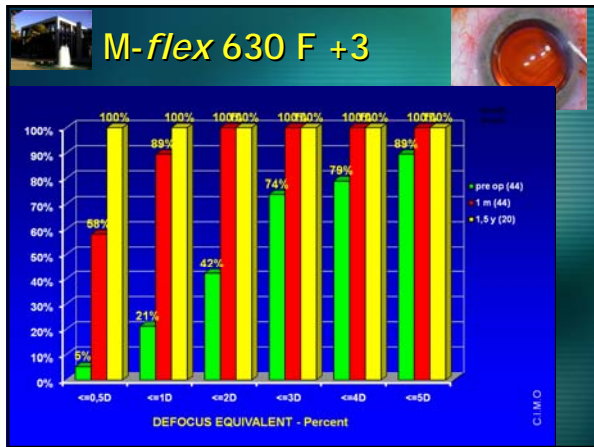
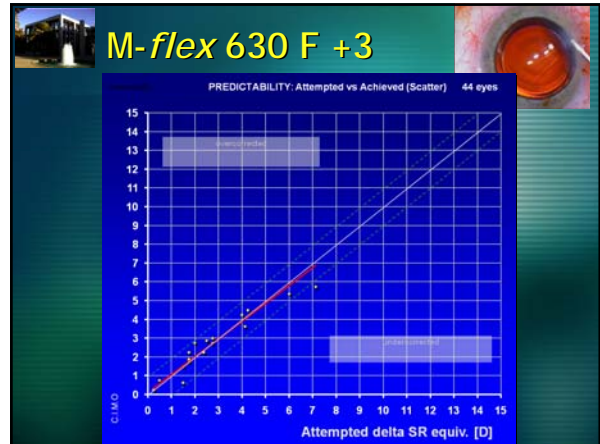
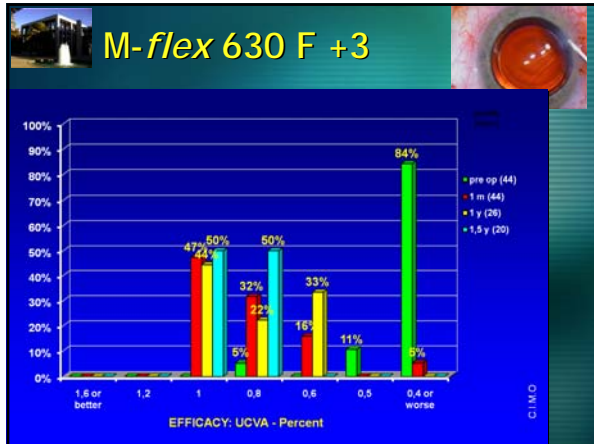
"HIGH RISK" CANDIDATES
 (specially throughout the learning curve of a new IOL):
 Judges, lawyers, pilots, drivers, TV-radio journalists,....

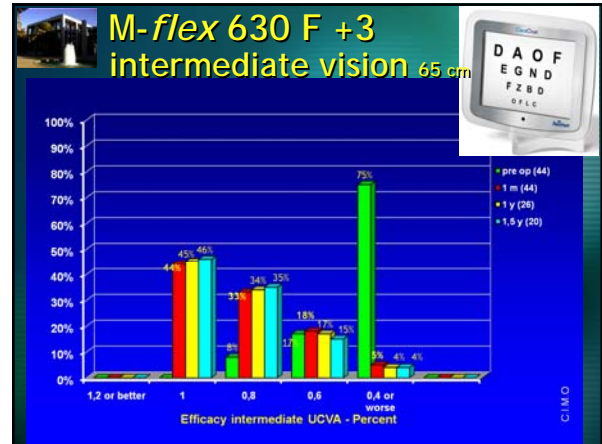


M-flex 630 F +3 distance vision evaluation









COMPLICATIONS
Mflex 630F

- MONOCULAR DIPLOPIA: 1
- SIGNIFICANT HALOS: 1**
- SIGNIFICANT UNDERCORRECTION (1,25 D.): 1
(Enhancement 3 months later with CK)
- PCO (YAG): 2 eyes after 1,5 year

INITIAL EXPERIENCE WITH M-FLEX-T 638 F

6 eyes, 3 patients

Patient #1:

Dr. Cezon
4/21/2007
CIIMO Sevilla

- sex: male
- age: 51 group: B
- profession: pottery-making
- OD: +4.50(-5)25° BCVA:20/25 AD.: +2.
- OI: +4.50(-4.25)165° BCVA:20/25 AD.:+2

- OD: M-flex-T 638 F, +18.5ad.
- OI: M-flex-T 638 F, +20.0 ad.

INITIAL EXPERIENCE WITH M-FLEX-T 638 F

6 eyes, 3 patients

Patient #1:

6 month postop.:

OD:
UCVA: 20/20 J1
+0.50(-0.50)30°

OI:
UCVA: 20/25 J2
(-0.75)175°
BCVA: 20/20

"SOME TIMES, HALOS AT NIGHT"

INITIAL EXPERIENCE WITH M-FLEX-T 638 F

6 eyes, 3 patients

Patient #2:

- sex: female
- age: 61 group: A
- profession: office-worker
- OD: -7.50 (-1.75)35° BCVA:20/30 AD
- OI: -6(-3)170° BCVA:20/30 AD.:+3

- OD: M-flex-T 638 F, +12 ad.
- OI: M-flex-T 638 F, +12.5.0 ad.


INITIAL EXPERIENCE WITH M-FLEX-T 638 F

6 eyes, 3 patients

Patient #2:

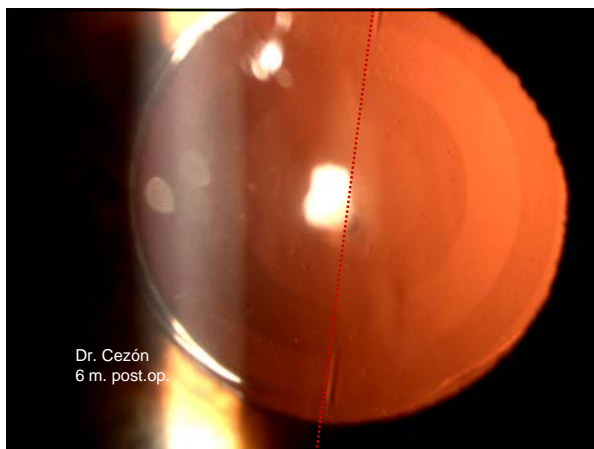
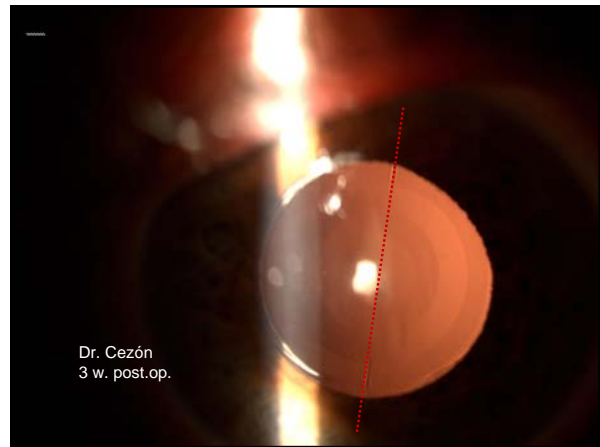
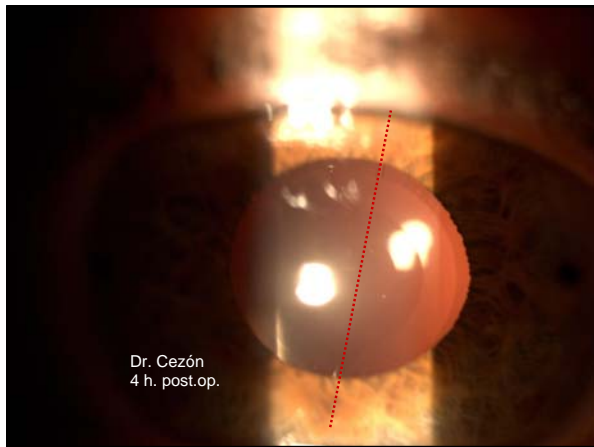
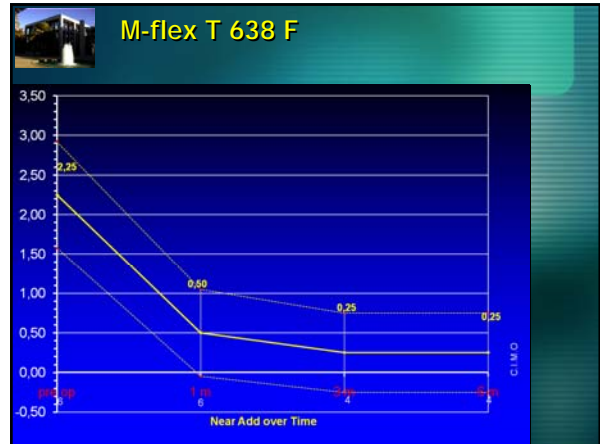
6 month postop.:

OD:
UCVA: 20/30 J1
-1
BCVA: 20/25



NO HALOS

OI:
UCVA: 20/30 J1
-0.75
BCVA: 20/25



M-flex .CONCLUSIONS 1.5-year follow-up

1. Safe, stable and predictable
2. EXCELLENT DISTANCE VISION
3. GOOD INTERMEDIATE VISION
4. "ACCEPTABLE" NEAR VISION ("social" reading IOL)
5. Preliminary results with M-flex-T promising.

