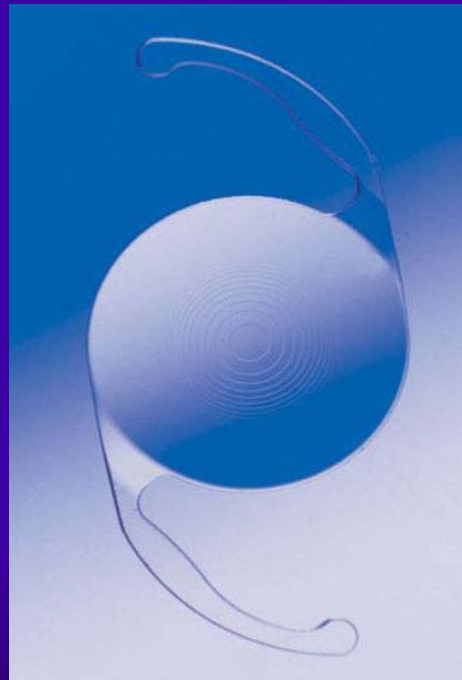
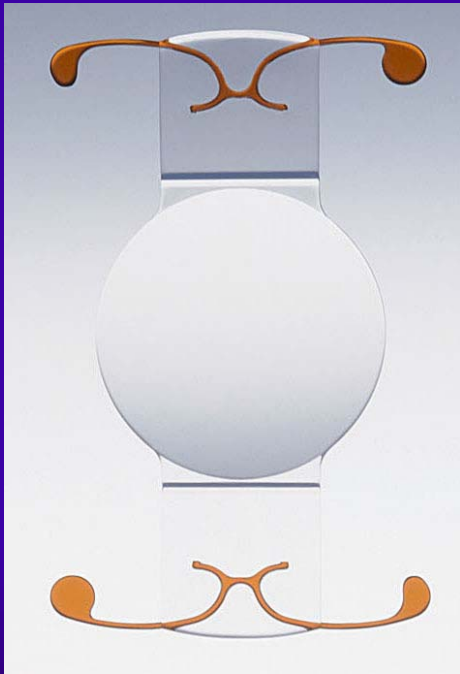


Presbyopic IOL's



John F. Doane, M.D., F.A.C.S.

Discover Vision Centers

Kansas City, Missouri, U.S.A.

Financial Interest

Investigator for
ReVision Optics, Bauch &
Lomb, Carl Zeiss Meditec, Ista,
I-Therapeutixs, Calhoun Vision

Presbyopic IOL's have an Achilles' Heel?

Residual Refractive Error

Richard Lindstrom, M.D.

Editorial OSN, August 10, 2009

1985, ESCRS, Copenhagen

600 patient 3M clinical trial

Only factor that correlated with patient
satisfaction was the refractive outcome

Lindstrom, cont.

My conclusion after 25 years of studying the premium IOL field, is that the level of patient satisfaction is not dependent on

- careful patient selection *
- careful patient counseling *
- reducing patient expectations *

Reality of Monofocal IOLs

Implant and walk away

Less than 1% and probably less than
0.5% (1 / 500) to 0.1% (1 / 1000) of
eyes need any further manipulation.

Presbyopic IOL's + Laser Vision Correction

A Mandatory Symbiosis



ZEISS

VisuMax

MEL 80

What Refractive Result is Required for Presbyopic IOL's to Work?

The Accuracy Bar is Set Higher with Presbyopic IOL's

JFD – personal experience

Monofocal IOL's: + / - 1 Diopter : 2 D

Lasik: +/- 0.5 Diopter : 1 D

Presbyopic IOL's: +/- 0.25 Diopter : 0.25 !!!

Lindstrom – “**good outcome**” = complication free &
refractive outcome within 0.5 D emmetropia - OSN Aug
10, 2009, Guy Kezerian, M.D. DataLink

How Successful Are We?

For your monofocal bilateral distance patients what % want glasses for better distance?

Likely 30% - a little cyl, road signs

Optimizing Presbyopic IOL's with Excimer Laser Enhancements

How Frequent Are LVC Enhancements?

Is it 5%, 10%, 15%, 25%, 40%?

Dick Mackool – 20%

Michael Lawless – 20%

Ballpark 25% of presbyopic IOL's

Planned or Unplanned

Why so high?

About 4,500 rea\$on\$ per eye

Expectations

Optical shop is not the back door to
happiness after Presby IOL

Our Current Predictability

Surgeon View: Awesome but could be better

Patient View: It is either right or wrong

Definition of “right” = no need for glasses for distance

What you do not have to enhance?

20/20 Distance and J-1 at Near

&

J-1 Intermediate (computer)

Now for Ametropia

Presbyopic lens + significant residual refractive



Unhappy patient, Unhappy Spouse of Patient,
Unhappy Surgeon, Staff, Office

Ametropia Postop

May or may not work

mini-mono with current bilateral
crystalens

In general though with presby IOL plano
sphere is required

Specific Lens Issues

CrystaLens

Avoid hyperopia

Even small amounts, i.e. + 0.25 or + 0.50
will impair intermediate and near

Goal: dominant eye ~ plano sphere, maybe
-0.25 ; non-dominant eye ~ - 0.5 to -1.0

ReStor 4.0

Can be very unforgiving

Little to no cylinder allowed

Mismatch of uncorrected acuity and residual refractive error

Plano Sphere is required

ReStor 3.0 jury still out for me personally

ReZoom

Seems to be more forgiving
Cylinder must be corrected

Secondary Procedures

Crystalens ReSTOR

LRI

23%

32%

YAG

37%

26%

LASIK/PRK

26%

25%

Presbyopic IOL + LVC
Enhancement =
Bioptics

What is it and how do you do it?

What is it?

Combining 2 or more surgeries to achieve the refractive result associated with refractive IOL placement

Presbyopic IOL's + Laser Enhancements

1. Planned
2. Unplanned

Unplanned LVC Enhancement

Correction of residual refractive error

Timing: Surface Laser at 4 weeks after IOL
If Lamellar (femto flap) 6-8 weeks
(**Must make them functional**
during ametropia, specs or
contact lenses)

Planned Laser Enhancement

Large amount of astigmatism

Cornea has form fruste shape > PRK

Large ametropia requiring a bioptic
technique

Presby IOL + Planned Lasik

Two approaches

1. Presby IOL and then Lasik
2. Flaps, IOL's and then Laser

Prepping Before LVC Enh.

Should you do a YAG before Excimer?

With Accommodative IOL - **I Do**

This may obviate need for the “
enhancement “

The Business Question

But, I am not an Excimer Laser Jockey

Solution: Either become one
or partner with one

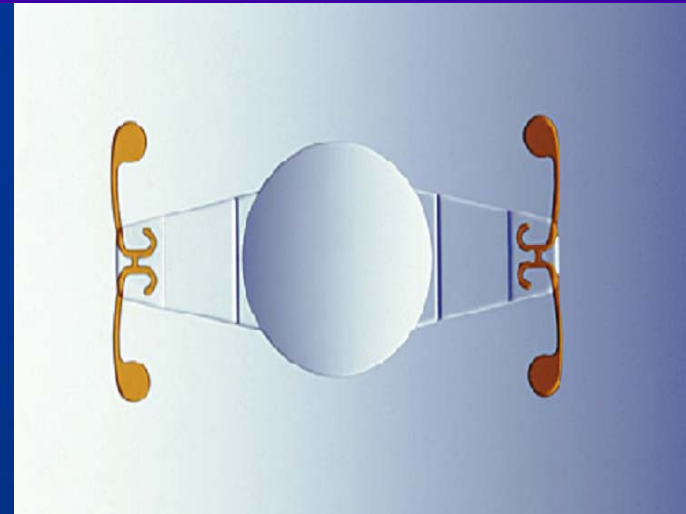
In Conclusion

It is as much about the CPU between the patient's ears as it is about the Presbyopic IOL

At present LVC enhancement is married to Presbyopic IOL's and should be presented in the consent process

Presbyopic Correction

Fact? Fallacy? Fun?



In Conclusion

With proper preop education “ the
enhancement “ can be the conclusion
to a happy patient experience

Happy patients will refer friends

Thank You for
Your Attention!