

DISCLOSURES:

- Allergan/Abbvie
- Viatris

GOALS OF TODAY'S LECTURE

- 1. What is the current state of presbyopia and presbyopia treatments?
- 2. How to determine if surgery is a good option for your patient
- 3. Pro and cons of presbyopia surgeries?

4

- 4. Considerations for each type of surgery
- 5. How to manage/comanage surgical interventions for presbyopic patients

3

PRESBYOPIA STATISTICS

- Greater than 1.8 billion presbyopes in the world1
 - Expected to rise to 2.1 billion by 20301
- Onset of age is approximately 40
 - $\bullet\,$ Younger in areas with closer proximity to the equator 2
- $\bullet\,$ Presbyopia has a suspected earlier onset due to the pandemic 3
- Estimated \$11 billion global productivity losses due to presbyopia⁴
- Every year approximately 1.4M new presbyopes⁵
- Die 16 "Produppe A bear of Count Transmet Opinio and Europe Transport Count opinionistics 2011 17, 1971 17.

 Die 16 "Produppe A bear of Count Transmet Opinio and Europe Transport Count opinionistics 2011 17, 1971 17.

 Berlin and County of County Transport Count

How many times today have you looked at your phone?

SETTING THE SCENE

- Existing patient comes into your office for an annual exam
 - Chief Complaint: Patient is noticing more difficulty seeing up close
 - Dx: Presbyopia
 - "Doctor- What are my options?"

What opportunities exist and what do we consider for our patients?

PRESBYOPIA TREATMENT COMES WITH INHERENT CHALLENGES

1. What are they?

2. How do we, as physicians, minimize these challenges?

3. How do we prepare/set patient expectations?

PATIENT CONSIDERATIONS FOR PRESBYOPIA TREATMENT-THE FIRST STEP

- Patient demographics
 Age, occupation, hobbie
- Surgical history
 Ocular health

7

- Level of presbyopia
- Previous ocular surgical history
 Anterior and posterior segment health
- Who does the procedure? Is there someone in your area?
- What presbyopia treatments has the patient previously tried?
- · Success vs failure Patient expectations
- Healing time

EVALUATING FOR PRESBYOPIA TREATMENT

- What are the presbyopes everyday needs?
 Intermediate vs near vs both
 - What options will best hit th
- Where is their vision lacking? Where is their vision doing well?
- · What is current level of presbyopia?

8

10

- Moderate= +1.5— +2.00 Advanced= +2.25+
- · What preoperative testing do I need?
 - OCTs, pachs, dilated fundus exam, endothelial count, IOL master, A-scan, topography

9

THERAPEUTIC CONSIDERATIONS FOR PRESBYOPIA **TREATMENT**

· What options do we have to offer?



- "But I don't want to wear glasses or contacts anymore"
 - · What surgical options do we have available?

REFRACTIVE LENSECTOMY/CATARACT SURGERY FOR PRESBYOPIA MANAGEMENT

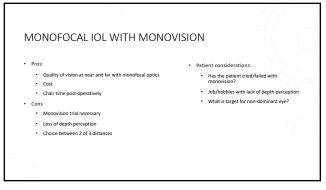
- · Surgical options:

 - Monofocal
 Allows for one distance optically Accommodative

 - Offers multiple focal points typically with designated "rings" in lens design Extended depth of focus (EDOF)
 Creates a single extended focal

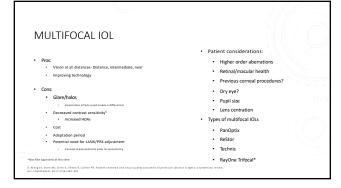
 - Small aperature
 Type of EDOF
 Light adjustable

11



ACCOMMODATIVE IOL Monofocal optics Conversation with patient about need for glasses No need for trials Non-dominant eye target · Amplitude of accommodation/healing variability -0.25 to -0.50sph Axial length
 Did the lens heal more forward or backwards than expected? Exercises post-operatively Cost to patient Adaptation period Types of accommodative IOLs: Crystalens/Trulign Chair time post-operatively Potential need for LASIK/PRK adjustment • Lumina* Corneal measurements prior to lensectomy Jellisee*

13 14



Pros

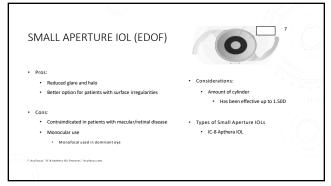
Reduced glare/halos compared to MF IOLS
Good distance and intermediate vision
Better option for higher order aberration patients

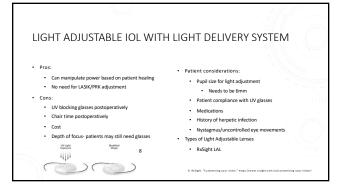
Cons
Reduced near VA compared to other lens options
Reduced near VA compared to other lens options
Cost
Potential need for LASIK/PRK adjustment
Conseal measurements prior to lensectiomy?

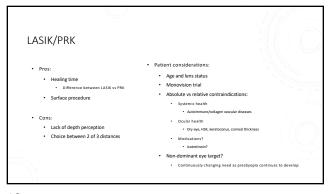
**Ret IOA-Appared of INLINE*

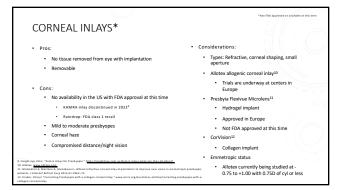
**Types of EDOF IOLS:
Symfory
Vivity
FineVision Triumf*

15 16

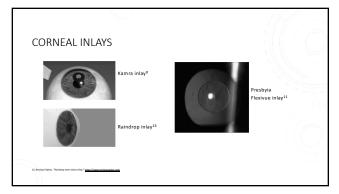








19 20

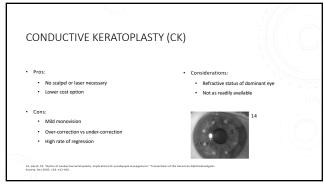


Pros:

No changes to any structures in the visual axis
Extended depth of focus- "pseudoaccommodation"

Cons:
Not FDA approved in the US at this time
Controversial

21 22



HYPOTHETICAL CASE #1

- A 46YOF patient comes into the office with near visual concerns.
- UCNNA 20/40
- Needs hyperopic correction to achieve 20/20 distance
- Measured add power of +1.25 gets her to 20/20 NVA
- Anterior and posterior seg findings WNL OU
- Has tried monovision and multifocal contacts with little success
- Reports inability to wear glasses due to hobbies
- Low amount of HOA
- What options are most appropriate for this patient?

23 24

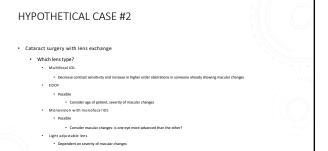
HYPOTHETICAL CASE #1 Best surgical options: Refractive lensectomy Discussion would include conversation about still having some accommodative ability and how that will possibly change Was not successful in monovision contacts + NOT a candidate for monovision refractive lensectomy Possibly accommodative, IDDF, or multifocal IDL LASIK/PRK Discussion would include conversation that ear add power will continue to change and need for enhancement or other surgical intervention may be necessary in the future Unsuccessful in monovision Cits

HYPOTHETICAL CASE #2

 67YOM patient with moderate cataracts presents for a cataract evaluation and is interested in regaining his near visual acuity as well as preserving distance visual acuity

- UCNVA 20/100
- Measured add power of +2.50
- Anterior seg findings WNL
- Posterior seg findings show mild pigment mottling in maculas OU
- What options are most appropriate for this patient?

25 26



HYPOTHETICAL CASE #3

56YOF patient presents to the office with near visual concerns and mild lens changes

UNVA 20/60

- Measured add power of +1.75
- Anterior seg findings show 8 RK incisions OU
- Posterior seg findings WNL
- Has worn monovision contact lenses in the past with success
- What options are most appropriate for this patient?

27 28

HYPOTHETICAL CASE #3

- 1. Refractive lensectomy
 - Discussion would include conversation about still having some accommodative ability and how that will possibly change
 Possibly accommodative, EDDF, monofocal with monovison, Light adjustable, small aperture
 - Would not recommend multifocal lens at this time
- 2. PRK
- Discussion would include conversation that near add power will continue to change and need for enhancement or other surgical intervention may be necessary in the future- possible cataract surgery at that time?
- What do K's look like? How flat is cornea from the RK incisions?

MANAGING PRESBYOPIC SURGERY PATIENTS

- Clear discussion over what outcome each surgery can provide
 - Paperwork sent to patient prior to surgical evaluation with explanation of options
 - Simulation devicesTime to decide
- Setting expectations after decision has been made
- Depending on procedure, may be a multi-step process- Pre AND post operatively
 Ocular health is WNL
 - Need for adjustments post operatively
 - Need for adjustments post operatively
 YAG, LASIK/PRK, UV light treatments
 - Patience is key!
- Consent forms
 "I have cheer
- "I have chosen ______ option for surgery and I understand the need for glasses for certain tasks may be necessary"
- Under promise and over deliver

WHEN SURGERY IS NOT THE RIGHT OPTION Drops - Vuity- Allergan/Abbvie¹³ - FDA approved October 2021 - 1.25% pilocarpine - Olosi- Orasis¹⁴ - FDA approved October 2023 - 0.4% pilocarpine - Preservative free - Preservative free - NIX2100 and UX2101- Lenz Therapeutics¹⁵ - Aceclidine-based eye drop - In trials

OVERVIEW

One surgical procedure does not fit all
One choice may not correct patients vision at all distances at all times
Multiple procedures may be necessary to achieve desired outcome
Setting expectations is key
Optimizing ocular surface health prior to surgical intervention yields best outcomes
Evaluation of entire eye is absolutely necessary

31 32

