


CL Selection and Patient Education
 NCLE Level II - 1 hour




Andrew S. Bruce, LDO, ABOM, NCLEM, FCLSA
 Contact: asbopticianry@gmail.com
 Website: www.asbopticianry.com

1

On behalf of Vision Expo, we sincerely thank you for being with us this year.

Vision Expo Has Gone Green!

We have eliminated all paper session evaluation forms. Please be sure to complete your electronic session evaluations online when you login to request your CE Letter for each course you attended! Your feedback is important to us as our Education Planning Committee considers content and speakers for future meetings to provide you with the best education possible.



2

Financial Disclosure Statement

Andrew Bruce provides consulting services for . . .

- VSP Optics/UUniversity
- Mitsui Chemicals

• All relevant relationships have been mitigated
 • He has NO financial interest in any product presented in this course.

3

OBJECTIVES

At the conclusion of this session, the participant should be able to:

- Discuss the pros and cons of the broad range of contact lens types and modalities available to today's contact lens patients
- Understand the factors to be considered when making lens selection and recommendations
- Communicate the importance of ensuring that every patient is well informed and educated, to be a successful contact lens wearer.

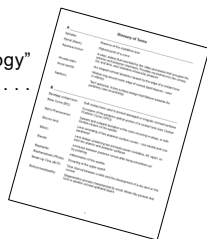
4

GETTING STARTED

5

BASIC TERMINOLOGY

Download
 "Contact Lens Terminology"
 from *Event Handouts* at . . .
www.asbopticianry.com



6

DOCTOR'S "OK FOR CONTACTS"

Dr. Terry Youngman
3403 E. McDowell
Phoenix, AZ 85008
(602) 225-9090

PATIENT: Connie Tactlens DATE: 2/29/23

	SPHERICAL	CYLINDRICAL	AXIS	PRISM	BASE
R	-2.00	SPH			
L	-2.00	SPH			
OS					
OD					

OK for Contacts
By: Terry Youngman, O.D.

7

CHOICES, CHOICES!

Soft or Hard? Factors to Consider:

- Rx
- Patient expectations
- Ocular & medical history
- Previous contact lens experience
- Palpebral fissure size.



8

WHY FIT A RIGID LENS AND NOT A SOFT?




- Excellent optics
- Totally customizable to facilitate great precision
- Rigid properties mask corneal irregularities
- Allow precise management of an astigmatic cornea
- Provide dry eye relief.

9

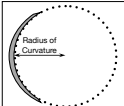
WHY FIT A SOFT LENS AND NOT A RIGID?

- Easy patient fitting and adaptation
- Patient friendly
- Multiple modalities available
- Easy maintenance
- Any others . . .



10

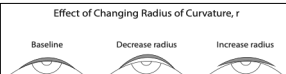
BASE CURVE SELECTION



- Rigid lens, fit on K, FTK, STK
- Soft contacts, select BC as close as possible to flat K

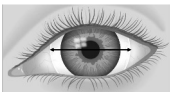
Keratometry Values	Soft Lens Base Curve <small>(Based on a 14.0 DIA)</small>
< 42.00D	8.8 to 9.0
42.00D to 45.00D	8.6 / 8.7
> 45.00D	8.2 to 8.4

Effect of Changing Radius of Curvature, r



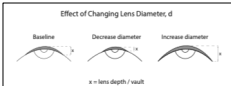
11

LENS DIAMETER SELECTION



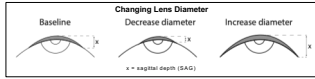
- **HVID:** Horizontal Visible Iris Diameter used to determine lens diameter
- Rigid lens avg. 9.2mm
- Soft lens diameter = HVID + 2mm

Effect of Changing Lens Diameter, d

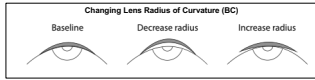


12

CHANGING OAD / BC



- Decreasing diameter loosens the fit
- Increasing diameter tightens the fit



- Decreasing radius of curvature tightens the fit
- Increasing radius of curvature loosens the fit.

13

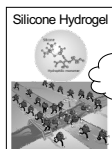
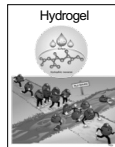
MATERIAL SELECTION RIGID LENS

- Broad variety of options
- Fluorosilicone Acrylate (FSA) = Gold Standard
- Influences Dk/t, wettability, and deposit accumulation.

14

MATERIAL SELECTION SOFT LENS


- Hydrogel (HEMA)
- Silicone hydrogel (SiHy)
- Influences Dk/t, wettability, and deposit accumulation.



Another path for Oxygen

15


SOFT LENS MODALITIES



- Dailies
- Weekly
- Bi-weekly
- Monthly
- Bi-monthly
- Extended Wear.

16

MODALITY SELECTION PROCESS



- Lifestyle
- Vocation
- Hobbies
- Medical / ocular history
- Motivation
- Likelihood for compliance.

17

SPHERICAL OR TORIC SOFT LENS?

CYLINDER POWER	SPHERICAL OR TORIC
< 0.75D	Spherical Equivalent
> 0.75D	Toric
= 0.75D	Spherical Equivalent / Toric

18

SPHERE EQUIVALENT POWER

Sphere Equivalent, SE = 1/2 cylinder + Sphere

Example

Rx: +5.00 -2.00 x 180

SE = (1/2 x -2.00) + (+5.00)

SE = **+4.00D**

19

COMPENSATING FOR VERTEX DISTANCE

Effective Power Formula = $\frac{\text{Original Power}}{1 + (\text{change in VD (m)} \times \text{Original Power})}$

Q: Calculate contact lens power for +5.00DS refracted at a VD of 12mm

USING FORMULA

Effective power at a corneal plane = $+5.00 / 1 + (+0.012 \times +5) = \mathbf{+4.71D}$

(CONFIRM: Lens moved closer so effective power should be less "plus")

What CL Power should be used? **+5.25D**

IMPORTANT

If VD increases, change is negative "-". If VD decreases, change is positive "+".

20

LENS SELECTION FOR THE PRESBYOPIC PATIENT

- Material/modulus
- Single vision with readers
- Multi-focal
- Monovision.



21

PREPARE THE PATIENT FOR SUCCESS

22

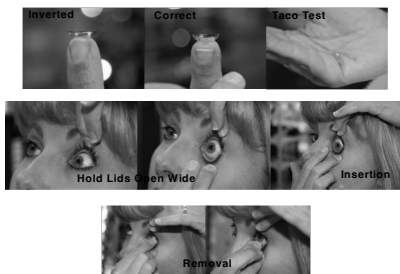
PATIENT EDUCATION

- Explain the entire process
- Time commitment with complex designs
- Insertion and removal (I&R).



23

INSERTION AND REMOVAL SOFT LENSES



24

INSERTION AND REMOVAL GP LENSES

Insertion



Removal



DMV



25

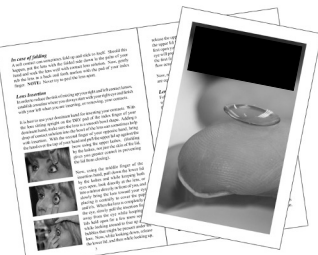
CARE AND MAINTENANCE

- Initial cleaning
- Disinfect and condition overnight
- Rinse off with fresh solution
- Dump out old solution



26

GO THE EXTRA MILE



27

WEARING SCHEDULE

- Initial wear schedule
- Maximum wear time.

28

LENS CARE SOLUTIONS

NOT ALL ARE CREATED EQUAL

29

DOS AND DON'TS

Do...

- Sterilize case every week
- Replace case every 3 months
- Replace lenses as recommended
- Only use recommended care solutions
- Return to the office or call with any concerns or questions.

30

DOS AND DON'TS

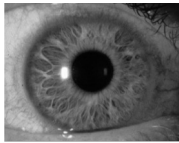
Do Not . . .

- Sleep in non-FDA approved contacts
- Swim in contacts
- Hot tub in contacts
- Shower in contacts
- Use saliva to clean
- Wear for longer than recommended.



31

EDUCATE PATIENTS KEEP AN EYE OPEN FOR . . .



- Eye pain/ache
- Redness
- Discharge
- Irregularities in vision.

32

IMPORTANCE OF PREMIUM QUALITY SUNGLASSES



33

IMPORTANCE OF ONGOING PROFESSIONAL EYE CARE



34

TO TAKE AWAY . . .

- Contact lenses can expand your patient's world
- Discover their lifestyle needs to determine the most appropriate product to recommend
- Prepare them for success and a healthy contact lens wearing life – especially with pediatrics
- Make a difference and be proud!

35



Andrew S. Bruce

Thank You!

Speaker Contact Information
www.asbopticianry.com
 Email: asbopticianry@gmail.com
 Follow me on Instagram @asbopticianry

36