Precise Knowledge on Presbyopic Contact Lenses

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Abstract
This study reveals about types of presbyopic contact lenses as well as its advantages and disadvantages.

Keywords: Presbyopic; Monovision; Contact Lenses

Before describing about presbyopic / bifocal contact lenses, it should be focused on its advantages and disadvantages [1-3].

Advantages
a. Patient will be free from spectacles.
b. Spectacle weight will be a considerable factor.
c. Cosmetically, contact lenses are better than spectacles.

Disadvantages
a. Reduced Stereo Acuity
b. Reduced Contrast Sensitivity
c. Fluctuation of vision
d. Changes in Binocular Balance

Types of Presbyopic Contact Lenses
A. Simultaneous vision Bifocals
B. Alternate vision Bifocals
C. Monovision
D. Modified Monovision
E. Enhanced Monovision
F. Diffractive Bifocals

Simultaneous Vision Bifocals
The meaning of Simultaneous vision is, light will enter in each eye and origination of light will be from the distance and near object. In this case, when patient is asked to look for distant object, at that time, near object will be blurred and when asked to look for near object, distance object will be blurred. It consists of 3 designs:
• Concentric design
• Aspheric design
• Diffractive design

Routine, to improve visual functions, Hybrid design is considerable. Main disadvantage of this design is Reduced vision Quality

Alternate Vision Bifocals
Here, by changing the contact lenses, patient is able to see distant and near object. When patient is trying to see at near object, lower part of the contact lenses will be placed in front of the pupil.

Monovision
Here, one eye is used for distance purpose and another eye is used for near purpose.
Modified Monovision
Here, bifocals are placed in both the eyes. Bifocal of one eye is used for distance purpose and bifocal of another eye is used for near purpose.

Enhanced Monovision
Here, single vision lens is placed in one eye and in another eye, bifocal contact lens is placed.

Diffractive Bifocals
Here, Huygen’s principle (Light Wave Theory) is applied. Diffractive contact lenses come under Simultaneous Vision. This design consists of several zones. Zones are progressively increased. Here, distance and near power is placed at the optic zone but distant and near power is not placed on the pupillary zone.

References
1. Iacle Module 8, 1st (Edn).