

SUMMARY

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The term Presbyopia means reduction in the amplitude of accommodation, which occurs with aging. It implies recession of the near point while the far point is unaffected.

Presbyopia is a chronic condition with a slow indefinite onset. Its prevalence can be considered to be 100% by the age of 50 years, it is considered as a normal aging process and not as a disease.

Helmholtz did much to clarify the mechanism of accommodation, but despite much research in the last hundred years there is still no consensus on the precise mechanism of accommodation.

Surgical treatment concept and methods for presbyopic refractive surgery, which have been developed, are relatively new. The methods include:

i- Scleral surgery for presbyopia includes

- Scleral expansion bands.
- Anterior ciliary sclerotomy.

Both of which are based on Schachar theory of accommodation, reversal of presbyopia can be achieved by

increasing the distance between the equator of the lens and the ciliary body.

ii- Corneal surgery includes:

- Small diameter intracorneal inlay lens.
- Monovision concept of correcting one eye for distance and the other for near.
- Multifocal cornea created by using PRK or LASIK.

iii- Crystalline lens surgery includes:

- Laser modification of crystalline lens.
- Multifocal intraocular lens implantation.

Surgical correction of presbyopia is promising but needs more investigations.