醫院管理局
HOSPITAL AUTHORITY

REFRACTIVE ERRORS MYOPIA, HYPEROPIA, ASTIGMATISM AND PRESBYOPIA

Refractive errors mean that when light rays entering the eye cannot be focused onto the surface of the retina which leads to the formation of blurred image.

Myopia

Myopia (short-sightedness) results when the length of an eyeball is too long. The image of a distant object is focused in front instead of onto the retina

Hyperopia

Hyperopia (long-sightedness) results when the length of an eyeball is too short. The image of a distant object is focused behind instead of onto the retina

Astigmatism

Astigmatism is due to the irregular curvature of the cornea, so that light fails to come to a single focus on the retina.

Common corrective measures for myopia, hyperopia and astigmatism:

- Spectacles / Contact lenses
- Refractive surgery, which includes:-
  - Intraocular lens implantation, with or without lens extraction
  - Corneal-based procedures e.g. laser-assisted in situ keratomileusis (LASIK), SMall Incision Lenticule Extraction(SMILE)

Presbyopia

Presbyopia is a normal aging process resulting from the loss of flexibility of the lens in focusing near subjects.

Common corrective measures:

- Near Spectacles / Contact lenses
- Refractive surgery which includes:
  - ➢ - Lens extraction and multifocal intraocular lens implantation or monovision (one eye corrected for distance vision and one eye corrected for near vision)
  - ➢ Corneal laser refractive surgery

Remarks

In general, spectacles are the most simple and basic method for correcting refractive errors. If you decide to undergo refractive surgery, you have to understand the operative procedure and the risks involved before making your decision. The choice of corrective methods may be affected by the type and extend of refractive error, occupation and aesthetic need. Refractive surgery is currently not provided by the Hospital Authority Ophthalmic Services.

Specialty Advisory Group（Ophthalmology）
First Published 2019