



SEBES PATIENT INFORMATION

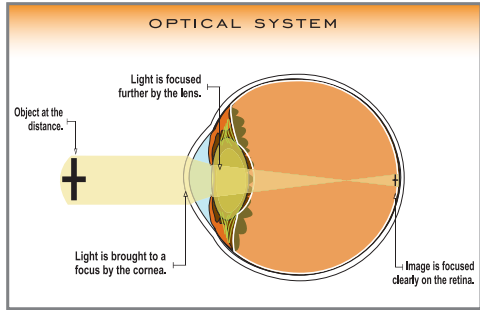
SIMPLY speaking

Common Eye Diseases

PRESBYOPIA

The Optical System of the Eye

Ideally, the unaided eye should focus effortlessly on all objects we want to see. This ideal condition is called Emmetropia (*emme* comes from the Greek word that means well-proportioned). Light coming into an emmetropic eye are brought to a focus on the retina (the photoreceptive tissue at the back of the eye) by the cornea (the transparent dome in front of the eye) and our natural crystalline lens (which is suspended from a band of ciliary muscles behind the iris and pupil). The primary determinants to achieving a clear focus on the retina are the focusing power of the cornea and the length of the eyeball. The focusing power of the cornea is determined largely by its static anatomical curvature. The lens curvature (and power) can change within a narrow range to finely adjust the focus on the retina through the action of the ciliary muscles. Unfortunately, due to genetic variation affecting the curvature of the cornea and the length of the eye, not everyone has well proportioned eyeballs and “20/20” vision (see *Visual Testing*).



Presbyopia

Loss of the ability of the optical system to shift focus from far to near (accommodation) starts in childhood but becomes much worse after the age of 40 years old. This is commonly confused with far-sightedness.

Symptoms

- Blurred near vision especially on waking or in the evening
- Requires strong light to read at near
- Headache or eye strain with prolonged reading
- Printed words become doubled or run into each other
- Reading materials or photographs have to be placed farther to be viewed clearly
- General difficulty seeing small objects or details at close distances

Corrected by

- Plus (“+”) spherical lenses ranging from +1.00 to +3.00 are placed usually in the lower third of existing distance correction in bifocal and progressive lenses
- Reading glasses that only have the plus spherical lenses will work in patients who have no distance correction or are emmetropic
- Taking off distance glasses in myopic eyes, because they are naturally focused at near without accommodation, obviates the need for reading glasses.
- Magnifying lenses may achieve the same result but are inconvenient

Usual cause

- Aging especially after the age of 40 years
- Eye drops designed to dilate the pupils usually decrease accommodation
- Drugs that affect the nervous system taken orally or transdermally may weaken accommodation.

Consultation Hours: 8:00am - 6:00pm, Monday - Saturday

G/F Belson House, 271 EDSA (near Connecticut St.), Mandaluyong City

Call for an appointment: Tel: 7217135 / 7216412

For more information about our facilities: <http://www.galileoeyecenter.com>

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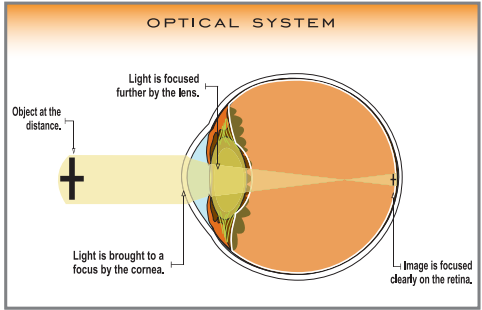
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