

Double Vision

What is Double Vision?

If you see two of whatever you are looking at simultaneously, you may have a condition known as double vision, also referred to as diplopia. Double and blurred vision are often thought to be the same, but they are not. In blurred vision, a single image appears unclear. In double vision, two images are seen at the same time, creating understandable confusion for anyone who has it.

What causes double vision?

There are two possible causes.

1. Refractive. Light from an object is split into two images by a defect in the eye's optical system. Cataracts might, for example, cause such a defect.
2. Failure of both eyes to point at the object being viewed, a condition referred to as "strabismus" or "squint". In normal vision, both eyes look at the same object. The images seen by the two eyes are fused into a single picture by the brain. If the eyes do not point at the same object, the image seen by each eye is different and cannot be fused. The result is double vision. Why might eyes not point in the same direction? Possibly because of a defect in the muscles which control the movement of the eyes or in the control of these muscles through the nerves and brain.

What are its implications?

Double vision can be extremely discomfoting. The brain acts to alleviate the discomfort by suppressing, or blanking out, one of the images. In young children, if this suppression persists over a continued length of time, it can lead to an impairment of the development of the visual system. The suppressed eye may get to the point where it is unable to see well, no matter how good the spectacle or contact lens correction. Doctors call this condition amblyopia. Since it is a result of a defect in the interpretative mechanisms of the eye and brain, it is more difficult to treat than a refractive condition (one having to do with the eye's ability to bend light).

How is it treated?

Treatment of double vision consists of eye exercises, surgical straightening of the eye or a combination of the two. Therapy is aimed at re-aligning the squinting eye where possible without surgery and re-stimulating the part of the visual pathway to the brain, which is not working correctly.