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Diplopia

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Synonyms

[Double vision](#); [Strabismus](#)

Definition

Diplopia is essentially double vision caused by a mismatch in the visual image projected on the retina from the two eyes. The object is perceived by the brain in two different images. In normal vision, lateral movement is coupled with medial movement so that both eyes remain fixed on the same object.

Current Knowledge

Diplopia can be caused by a number of different conditions, including interruption of the peripheral sixth nerve, dysfunction in the extraocular muscles, and pathways caused by various disorders (thyroid conditions, internuclear ophthalmoplegia, disorder of the neuromuscular junction, or by a hypoplastic optic nerve). It can occur after a variety of insults to the central nervous system, that is, head injury, stroke, degenerative disease, and ingestion of toxins. Patients will sometimes tilt their heads so that both eyes are looking sideways and may not see double at all angles. Children learn to suppress one image, and the condition can result in permanently impaired visual acuity in one eye if it is not corrected before the age of 9. Patching the unsuppressed eye will force the suppress eye to perceive images.