

Hand Held, Self Registering Diplopometer (Device for Quantitating the Field of Double Vision)

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Technology description

Hand-held, self-indexing, lightweight inexpensive to manufacture instrument for detecting and quantifying the degree of diplopia in a patient. Binocular Diplopia, or double vision, occurs if the eyes are misaligned and aim at different targets, which results in two non-matching images will be sent to the viewer's brain. When the brain accepts and uses two non-matching images at the same time, double vision results. Double vision is dangerous to survival, so, the brain naturally guards against its occurrence. In an attempt to avoid double vision, the brain will eventually disregard one of the mismatching images. That is, the brain will ignore one eye (called suppression). Due to the brain's ability to suppress one eye, a person's double vision can appear to go away without medical evaluation or treatment. However, in that event, the causes of the double vision are very likely still present and loss of vision in one eye has probably occurred due to lack of treatment. When vision in one eye is lost, the individual also has lost normal depth perception and stereo vision. Fortunately, the loss of vision may be temporary and is likely treatable.

Institution

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