Intraocular Pressure (IOP)

The fluid pressure inside of one’s eye, known as the intraocular pressure (IOP), is an important measurement used by eye care professionals to assess the overall health of a patient’s eyes as a routine part of a comprehensive eye exam. Optometrists may use either contact or non-contact tonometry in order to determine this value.

Here at U See LA Optometry, our optometrists use contact tonometry in order to assess the IOP. One method involves using a pen-like device known as the tonometer to gently touch the surface of the patient’s eyes after numbing drops are applied to the eyes. This procedure is painless and risk-free, but is extremely useful in determining whether or not a patient’s IOP is within a healthy range. You may feel the instrument gently tickle your eyelashes, and the procedure is over within seconds.

Non-contact tonometry is better known as the “puff-of-air” test, during which a patient is asked to look into a light inside a machine, when a small burst of air is puffed into the eye. The machine determines the patient’s IOP based off of the eye’s resistance to the puff of air, which an optometrist then checks to make sure is within normal range.

Normal IOP values have been defined as between 10-20 mmHg, with the average value being 15.5 mmHg. Ocular hypertension, or elevated IOP values, can be an important indicator of damage being done to the optic nerve, which can ultimately lead to glaucoma if not treated immediately. On the other hand, hypotony, or intraocular pressure less than or equal to 5 mmHg could mean there is fluid leakage in the eyeball causing deflation and a lower pressure than normal. These are serious conditions that may be detected using tonometry, therefore constant monitoring of IOP values by an eye care professional through annual eye exams is highly recommended.

Sources:
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http://www.aao.org/bcscsnippetdetail.aspx?id=f010bbf6-3f3e-486b-b5cd-0ad86ddb9d74