SACCADE ANALYTICS

AN EYE ON SOLUTIONS

Why?

“InSight™ allows for assessment of visual and vestibular brain functions and appropriate neuroplasticity stimulation”.

Dr. A. Ptito

Neuropsychologist, Montreal Neurological Institute

How?

Smooth Pursuit in 2D (Head-free or head-fixed) period.

During visual pursuit, the patient tracks a moving target following a randomized sinusoidal pattern. The head-free test offers a better functional representation of real-life movement.

Saccades to 2D Stationary Targets.

The saccadic system allows rapid and accurate jumps in eye position to randomized targets.

Active Visual Vestibular Ocular Reflex (VOR).

The patient fixates on a target during active head turns. Because it includes sensory signals from both the neck and the visual system, this is a more functional movement than currently used in clinics.

Anti-Saccades.

The subject is instructed not to look at a target. Instead the patient must look at its perceived/predicted mirror image. This test adds a cognitive stage and visual map orientation before executing the saccade. It is often used to evaluate the function of the visual cortex.

Optokinetic Nystagmus (OKN).

The patient fixates on a target while a harmonic field of dots provides visual slip. This results in a nystagmus in the direction of the induced visual slip.

Spontaneous Nystagmus.

Spontaneous nystagmus is the involuntary movement of the eyes without any visual, vestibular, or cognitive stimuli and is an indicator of imbalance in the gaze orientation system.

InSight™. Fast. Simple. Accurate.

“Mobility and accuracy in a small package”.

Dr. H. Galiana,
Chief Scientific Officer, Saccade Analytics

✓ **Health Canada Approved**
✓ **30 Years of research at your fingertips.**

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Results with InSight™

Presenting the patient with metrics and results.

- Tracking in virtual reality with InSight™ delivers objective metrics on specific neurological functions in less than 10 minutes.
- Eye tracking and impaired eye movement indicate poorer recovery in concussed patients as well as decreased brain functions (Snegireva N & 2018, Armstrong 2018; Heitger & al. 2009).
- Commonly there are deficits in convergences and the presence of saccadic dysfunctions in concussion patients (Master & al. 2016; Ventura & al. 2015; Armstrong 2018).

Taking rehab to the next level.

- Head and eye exercises are the most likely prescribed rehabilitation protocols to deal with balance and vestibular dysfunctions following concussion (Alsalaheen & al. 2013).

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