

“ ICS IMPULSE® PROVIDES A MORE COMPLETE UNDERSTANDING OF AN INDIVIDUAL'S BALANCE CAPACITY ”



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ICS Impulse provides objective evidence of the capacity of each semicircular canal to respond to physiologic velocity stimulus as measured by VOR and saccades.

An example of how ICS Impulse has improved our patient care: We saw a 62-year-old female in May 2014 who complained of episodes of nonvertiginous imbalance initially mild and brief and then a severe episode which lasted at least an hour. She did not experience ear pressure or hearing loss or tinnitus. Her history was inconsistent with vertebral basilar insufficiency. She had migraine headaches previously. We were unsure both of the diagnosis and the extent of her balance deficit.

We had examined her initially in 2012 at which time she gave a five-year history of dizziness and blurred vision which occurred uniquely with rapid head on neck movements. At that examination, she had horizontal jerk nystagmus to the right after abrupt cessation of 180°/s head and neck

movement in the lateral plane with fixation denied. At this most recent evaluation, head on neck movement at 180°/s with vision denied resulted again in jerk nystagmus to the right after abrupt cessation of the stimulation. A rapid head thrust to the left resulted in hypometric eye movement. By incorporating the ICS Impulse we confirmed there was a left lateral as well as a left posterior weakness and also a right posterior weakness! The patient did not have a left o-VEMP or c-VEMP response to auditory stimulus and had weak right VEMPs. Use of the ICS Impulse provided information that made results of calorics and rotary chair, which we probably would have done in the past, clinically superfluous. Our current evaluation which includes impulse tests allowed us to know that at least two semicircular canals on one side were not working optimally and that a fairly extended trial of vestibular/balance rehabilitation therapy might be required.