

# ICS Chartr 200 ENG/VNG Abnormalities: Clinical Significance and Localization

The most portable solution available

Test	Abnormality	Clinical Sign.	Localization		Comments	
			Periph	CNS		
<b>Saccade</b>	Saccadic dysmetria (overshoot/undershoot)	+++	0	***	Rule out drugs and inattention Record from each eye independently	
	Saccadic slowing	+++	0	***		
	Delayed saccades	++	0	***		
	Internuclear ophthalmoplegia	+++	0	***		
<b>Tracking</b>	Defective pursuits (uni-/bilateral)	+++	0	***	Rule out intense vestibular nystagmus w/o vision Record from each eye independently	
	Disconjugate pursuit	+++	0	***		
<b>OPK</b>	Asymmetry	+++	0	***	Usually congenital nystagmus	
	Reduced response intensity	+++	0	***		
	Inversion	+++	0	***		
<b>Gaze with vision</b>	Bilateral horizontal gaze evoked nystagmus	+++	0	***	Rule out intense vestibular nystagmus w/o vision Usually congenital nystagmus Not abnormal if seen only w/o vision	
	Unilateral horizontal gaze evoked nystagmus	+++	0	***		
	Pendular nystagmus	+++	0	***		
	Square wave jerk nystagmus	+++	0	***		
	Periodic alternating nystagmus	+++	0	***		
	Rebound	+++	0	***		
	Upbeat/downbeat nystagmus	+++	0	***		
	Endpoint nystagmus	-	-	-	Normal	
	<b>Gaze w/o vision</b>	Horizontal vestibular nystagmus	++	**		*
Square wave jerk nystagmus		-	-	-		
<b>Static position</b>	Nystagmus with vision	+++	0	***	Rule out intense vestibular nystagmus w/o vision	
	Direction/intensity-fixed spontaneous nystagmus	++	**	*		
	Direction-fixed, positional nystagmus	++	**	*		
	Direction-changing geotropic nystagmus	++	**	*	Rule out PAN II (Positional Alcohol Nystagmus, phase II)	
	Direction-changing ageotropic nystagmus	++	*	**		
	Direction-changing in single head position	+++	0	***		
<b>Dynamic position</b>	Unilateral rotary BPPV-type nystagmus (torsion toward undermost ear/upbeat)	+++	***	*	Transient, fatigable, rotary, accompanied by vertigo Posterior canal, undermost ear Anterior canal, uppermost ear Lateral canal canalithiasis if geotropic/stronger toward involved ear Both ears, CNS lesion Persistent with no vertigo, usually bilateral.	
	(torsion toward uppermost ear /downbeat)	+++	***	*		
	Horizontal BPPV-type nystagmus	+++	***	*		
	Bilateral rotary BPPV-type nystagmus	+++	***	*		
	Downbeat nystagmus	+++	**	**		
	Any other nystagmus	+++	0	***		
<b>Caloric</b>	Unilateral weakness	+++	***	0	Almost always weaker ear lesion Almost always associated with spontaneous nystagmus Usually peripheral lesion in both ears, occasionally CNS Rule out overcalibration, TM perforation	
	Directional preponderance	+	**	**		
	Bilateral weakness	+++	**	*		
	Hyperactive response	++	0	***	Direction reversed for all 4 irrigations. Very rare. Rule out technical errors. Purely vertical nystagmus in all 4 irrigations. Very rare. Rule out technical errors.	
	Failure of fixation suppression	+++	0	***		
	Caloric inversion	+++	0	***		
	Caloric perversion	+++	0	***		
<b>Pressure</b>	Nystagmus concurrent with pressure change	+++	***	0	Perilymphatic fistula. Negative result does not rule out fistula.	

- +++ significant finding
- ++ intermediate finding
- + marginal finding
- \*\*\* almost always indicates site of lesion
- \*\* usually indicates site of lesion
- \* sometimes indicates site of lesion
- 0 almost never indicates site of lesion



Compiled by Kamran Barin, Ph.D. Based on Barber and Stockwell (1980)

## ICS Chartr 200



Hearing Assessment

Fitting Systems

Balance Assessment

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