
CHAPTER 9

Nystagmus, Saccadic Intrusions/Oscillations, and Oscillopsia

L. F. Dell'Osso, Ph.D.

Professor, Departments of Neurology and Biomedical Engineering, Case Western Reserve University, Director, Ocular Motor Neurophysiology Laboratory, Veterans Administration Medical Center, Cleveland, Ohio

Understanding the pathophysiology of ocular oscillations necessitates differentiation between those involving only the slow system and those that are purely saccadic. Oscillations containing both saccades and slow phases require identification of both the causative phase (i.e., that which takes the eyes away from their intended direction) and the corrective phase. Modern recording methods have made possible these determinations and thereby clarified the underlying ocular motor mechanisms responsible for many oscillations. Table 1 lists 45 types of nystagmus (two of which were not included previously) along with many other terms found in the literature to describe them; similarly, Table 2 lists 16 saccadic oscillations and intrusions with other descriptive terms. The tables evolved from those that appeared in previous book chapters.¹⁻⁴

The definitions and categorizations used herein result from applying criteria derived from accurate ocular motility recordings. They differentiate between nystagmus and saccadic oscillations, and as a result, I have found that some saccadic oscillations were originally described using the word *nystagmus*. Most oscillations were named before the benefits of accurate recordings. Quotation marks are used

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Forty-seven Types of Nystagmus

(Synonyms and other terms are indented under either the preferred or more inclusive designation).

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| 1. Acquired | 22. Intermittent Vertical |
| 2. Anticipatory | 23. Jerk |
| induced | 24. Latent/Manifest latent |
| 3. Arthrokinetic | monocular fixation |
| induced | unimacular |
| somatosensory | 25. Lateral Medullary |
| 4. Associated | 26. Lid |
| induced | 27. Miner's |
| Stransky's | occupational |
| 5. Audio kinetic | 28. Muscle-Paretic |
| induced | myasthenic |
| 6. Bartel's | 29. Optokinetic |
| induced | induced |
| 7. Brun's | optomotor |
| 8. Centripetal | panoramic |
| 9. Cervical | railway |
| neck torsion | sigma |
| vestibular-basilar artery insufficiency | 30. Optokinetic After-Induced |
| 10. Circular/Elliptic/Oblique | post-optokinetic |
| alternating windmill | reverse post-optokinetic |
| circumduction | 31. Pendular |
| diagonal | talantropia |
| elliptic | 32. Periodic/Aperiodic Alternating |
| gyratory | 33. Physiologic |
| oblique | end-point |
| radiary | fatigue |
| 11. Congenital | 34. Pursuit After-induced |
| fixation | 35. Pursuit Defect |
| hereditary | 36. Pseudo spontaneous |
| 12. Convergence | 37. Rebound |
| 13. Convergence-evoked | 38. Reflex |
| 14. Dissociated | Baer's |
| disjunctive | 39. See-Saw |
| 15. Downbeat | 40. Somatosensory |
| 16. Drug-induced | 41. Spontaneous |
| barbiturate | 42. Stepping Around |
| bow tie | 43. Torsional |
| induced | 44. Uniocular |
| 17. Epileptic | 45. Upbeat |
| ictal | 46. Vertical |
| 18. Flash-induced | 47. Vestibular |
| 19. Gaze-evoked | ageotropic |
| deviational | geotropic |
| gaze-paretic | Bechterew's |
| neurasthenic | caloric |
| seducible | compensatory |
| setting-in | electrical/faradic/galvanic |
| 20. Horizontal | labyrinthine |
| 21. Induced | pneumatic/compression |
| provoked | positional/alcohol |
| | pseudo caloric |