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Jacksonian March

Jacksonian march is the sequential spread of a simple partial seizure to involve other body parts, for example jerking may spread from one hand up the arm, to the ipsilateral side of the face. It may culminate in a secondary generalised seizure. The pathophysiological implication is of electrical disturbance spreading through the homunculus of the motor cortex. A sensory equivalent occurs but is rare.

References

Jackson JH. A study of convulsions. *Trans St Andrews Med Grad Assoc.* 1870; **3**: 162–204.
Jefferson G. Jacksonian epilepsy. *Postgrad Med J.* 1935; **11**: 150–62.

Cross Reference

Seizures

Jactitation

Jactitation is literally “throwing about”, but the term may also imply motor restlessness. The term has been used in various ways: to refer to jerking or convulsion of epileptic origin; or jerking of choreic origin; or of myoclonic origin, such as “hypnagogic jactitation” (physiological myoclonus associated with falling to sleep). It may also be used to refer to the restlessness seen in acute illness, high fever, and exhaustion, though differing from the restlessness implied by akathisia. Hence, it is essentially a non-specific term.

Cross References

Akathisia; Myoclonus; Seizures

Jamais Entendu

A sensation of unfamiliarity akin to *jamais vu* but referring to auditory experiences.

Cross Reference

Jamais vu

Jamais Vécu

- see *JAMAIS VU*

Jamais Vu

Jamais vu (literally “never seen”) and *jamais vécu* (“never lived”) are complex auras of focal onset epilepsy in which there is a sensation of strangeness or unfamiliarity about visual stimuli that have in fact been previously experienced (*cf. déjà vu*). This is suggestive of seizure onset in the limbic system, but is not lateralising (*cf. déjà vu*).

Cross References

Aura; *Déjà vu*

Jargon Aphasia

Jargon aphasia, a term coined by Hughlings Jackson, refers to a fluent aphasia characterized by a jumbled, unintelligible and meaningless (to the listener) output, with multiple paraphasias and neologisms, and sometimes echolalia (as in transcortical sensory aphasia). There may be a pressure of speech (logorrhoea).

There is debate as to whether jargon aphasia is simply a primary Wernicke/posterior/sensory type of aphasia with failure to self-monitor speech output, or whether additional deficits (*e.g.* pure word deafness, intellectual impairment) are also required. Others suggest

that jargon aphasia represents aphasia and anosognosia, leading to confabulation and reduplicative paramnesia.

References

Hillis AE, Boatman DB, Hart J, Gordon B. Making sense out of jargon. A neurolinguistic and computational account of jargon aphasia. *Neurology*. 1999; **53**: 1813–24.

Kinsbourne M, Warrington EK. Jargon aphasia. *Neuropsychologia*. 1963; **1**: 27–37.

Cross References

Anosognosia; Aphasia; Confabulation; Echolalia; Glossolalia; Logorrhoea; Neologism; Pure word deafness; Reduplicative paramnesia; Transcortical aphasias; Wernicke's aphasia

Jaw Claudication

Jaw claudication, or masticatory claudication, pain on chewing, is a classical symptom of giant cell (temporal) arteritis, but it may also be encountered in temporomandibular joint disease such as rheumatoid arthritis. External carotid artery stenosis proximal to the origins of the facial and maxillary branches has also been associated with jaw claudication, with improvement after carotid endarterectomy or stenting.

Reference

Goodman BW Jr, Shepard FA. Jaw claudication: its value as a diagnostic clue. *Postgrad Med*. 1983; **73**: 177–83.

Jaw Jerk

The jaw jerk, or masseter reflex, is contraction of the masseter and temporalis muscles in response to a tap on the jaw with the mouth held slightly open. Both the afferent and efferent limbs of the arc run in the mandibular division of the trigeminal (V) nerve, connecting centrally with the mesencephalic (motor) nucleus of the trigeminal nerve. The reflex is highly reproducible; there is a linear correlation between age and reflex latency, and a negative correlation between age and reflex amplitude.

Interruption of the reflex arc leads to a diminished or absent jaw jerk as in bulbar palsy (although an absent jaw jerk may be a normal finding, particularly in the elderly). Bilateral supranuclear lesions cause a brisk jaw jerk, as in pseudobulbar palsy (*e.g.* in motor neurone disease).

Reference

Pearce JM. The jaw jerk: an instance of misattribution. *J Neurol Neurosurg Psychiatry*. 2011; **82**: 351–2.

Cross References

Age-related signs; Bulbar palsy; Pseudobulbar palsy; Reflexes

Jaw Winking

Jaw winking, also known as the Marcus Gunn phenomenon, is widening of a congenital ptosis when a patient is chewing, swallowing, or opening the jaw (*i.e.* a trigemino-oculomotor synkinesis). It is believed to result from aberrant innervation of the pterygoid muscles and levator palpebrae superioris.

Eyelid closure on jaw movement or opening of the mouth, the inverse Marcus Gunn phenomenon, is also described, as the Marin-Amat syndrome, thought to be due to aberrant facial (VII) nerve regeneration.

References

Rana PVS, Wadia RS. The Marin-Amat syndrome: an unusual facial synkinesia. *J Neurol Neurosurg Psychiatry*. 1985; **48**: 939–41.

Sundareswaran S, Nipun CA, Kumar V. Jaw-winking phenomenon: report of a case with review of literature. *Indian J Dent Res*. 2015; **26**: 320–3.

Cross References

Ptosis; Synkinesia, Synkinesis

Jendrassik's Manoeuvre

Jendrassik's manoeuvre is used to enhance, or "bring out", absent or depressed tendon (phasic stretch) reflexes by isometric contraction of distant muscle groups, *e.g.* clenching teeth, or making a fist, interlocking fingers and pulling the hands against one another. If previously absent reflexes are then elicited, this may be denoted \pm . Co-contraction increases the gain in the monosynaptic reflex arc, as distinct from facilitation or post-tetanic potentiation which is seen in Lambert-Eaton myasthenic syndrome following tetanic contraction of muscles involved in the reflex. Jendrassik's manoeuvre is not useful for cutaneous reflexes such as the plantar response.

References

Delwaide P, Toulouse P. Facilitation of monosynaptic reflexes by voluntary contractions of muscle in remote parts of the body. Mechanisms involved in the Jendrassik manoeuvre. *Brain*. 1981; **104**: 701–9.

Jendrassik E. Ueber allgemeine Localisation der Reflexe. *Deutsche Archiv fur Klinische Medicin*. 1894; **52**: 569–600.

Pasztor E. Erno Jendrassik (1851–1921). *J Neurol*. 2004; **251**: 366–7.

Cross References

Augmentation; Facilitation; Reflexes

Jerk Nystagmus

- see NYSTAGMUS

Jitteriness

Jitteriness implies an exaggerated startle response, reflecting CNS overactivity. This may be confused in neonates with clonic seizures, but in the former there is stimulus sensitivity and an absence of associated ocular movements. However, both may occur in hypoxic-ischaemic or metabolic encephalopathies or with drug withdrawal.

Cross Reference

Seizures

Joint Position Sense

- see PROPRIOCEPTION

Jugular Foramen Syndrome

The glossopharyngeal (IX), vagus (X), and accessory (XI) cranial nerves may be damaged by lesions at or around the jugular foramen, producing a jugular foramen (or Vernet's) syndrome. This produces:

- Dysphagia, dysphonia, palatal droop, impaired gag reflex; ipsilateral reduced taste sensation on the posterior one third of the tongue, and anaesthesia of the posterior one third of the tongue, soft palate, pharynx, larynx and uvula, due to glossopharyngeal and vagus nerve involvement.
- Ipsilateral atrophy and weakness of sternocleidomastoid and trapezius muscles due to accessory nerve involvement (atrophy may be more evident than weakness, hence the importance of palpating the muscle bellies).

Recognised causes of the jugular foramen syndrome include:

- Skull base trauma/fracture.
- Glomus jugulare tumour.
- Inflammatory/infective collection at the skull base.
- Ischaemia.

The differential diagnosis includes retropharyngeal or retroparotid space occupying lesions, which may additionally involve the hypoglossal nerve (XII; Collet-Sicard syndrome) and the sympathetic chain with or without the facial nerve (VII; Villaret's syndrome).

Cross References

Dysphagia; Dysphonia; Gag reflex

Junctional Scotoma, Junctional Scotoma of Traquair

Despite the similarity of these terms, they are used to refer to different types of scotoma:

- *Junctional scotoma:*

Unilateral central scotoma with contralateral superior temporal defect, seen with lesions at the anterior angle of the chiasm. Such lesions have been said to damage the ipsilateral optic nerve plus the crossing loop of fibres (Wilbrand's knee) originating from the inferonasal portion of the contralateral eye, although it may be noted that some authors have questioned whether such a loop in fact exists.

- *Junctional scotoma of Traquair:*

A monocular temporal scotoma, sometimes even hemianopia, seen with optic nerve involvement sufficiently close to the chiasm to involve only ipsilateral crossing nasal axons, which subserve the temporal visual field, but sparing nasal axons crossing from the contralateral eye.

Reference

Larner AJ. A developing visual field defect. *Postgrad Med J.* 2002; **78**: 106, 112–113.

Cross References

Scotoma; Visual field defects