and antipsychotic drug intoxication.^{1,2} Although oculogyric crises due to encephalitis other than von Economo's encephalitis have been reported sporadically, they are usually seen in the chronic phase of the illness.³ This case is quite unusual in that they occurred only at the onset of the acute brainstem encephalitis.

It is difficult to explain such an extreme degree of downgaze attack solely as a release phenomenon due to the impairment of upgaze: an irritative lesion near the downgaze centre or its pathways seems to be the more plausible explanation in this case. Although the precise anatomical localisation of the downgaze centre is still unknown, there is evidence that thalamic structures may exert some influence on downgaze, and that its pathways may run medial-dorsally to the red nuclei, more ventrocaudally than those for upgaze, in the midbrain.⁴

In this case, herpes simplex virus type 1 is suspected as the aetiological agent from the typical clinical features, the serological investigations, and the efficacy of adenine arabinoside. Recently acute herpetic brainstem encephalitis has been reported from all parts of the world.⁵⁻⁹ Although the similarity of Bickerstaff's encephalitis and acute herpetic brainstem encephalitis has been pointed out by some workers,⁶ the latter has some unique clinical features: symptoms suggesting the stimulative lesions in the brainstem such as trismus, masticatory spasm, facial spasm, blepharospasm, palatal myoclonus, and hiccup have been described only in acute herpetic brainstem encephalitis and not in Bickerstaff's encephalitis.^{5,7,9,10} Until the causal virus of Bickerstaff's encephalitis is identified, the relation between these two conditions will remain unclear.

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References

- Walsh FB, Hoyt WF. Infections and parasitic invasions of the nervous system (chap 10). In: Walsh FB, Hoyt WF, eds. *Clinical Neuro-ophthalmology*, vol 2. Baltimore: Williams & Wilkins, 1969:1314-24.
- Walton J. *Brain's Diseases of the Nervous System*. Oxford: Oxford University Press, 1985:330.
- Clough CG, Plaitakis A, Yahr MD. Oculogyric crises and Parkinsonism: a case of recent onset. *Arch Neurol* 1983;40:36-7.

- Jacobs L, Anderson PJ, Bender MB. The lesions producing paralysis of downward but not upward gaze. *Arch Neurol* 1973;28:319-23.
- Dayan AD, Gooddy W, Harrison MJG, Rudge P. Brain stem encephalitis caused by herpesvirus hominis. *Br Med J* 1972;4:405-6.
- Ellison PH, Hanson PA. Herpes simplex: a possible cause of brain-stem encephalitis. *Pediatrics* 1977;59:240-3.
- Fenton TR, Marshall PC, Cavanagh N, Wilson J, Marshall WC. Herpes-simplex infection presenting as brainstem encephalitis. *Lancet* 1977;2:977-8.
- Hirst LW, Clark AW, Wolinsky JS, et al. Downbeat nystagmus: a case report of herpetic brain stem encephalitis. *J Clin Neuro-ophthalmol* 1983;3:245-9.
- Hayashi H, Mizuno M. Herpes simplex encephalitis presenting as signs of brainstem lesions. *Neurological Medicine (Tokyo)* 1984;20:186-9.
- Bickerstaff ER. Brain stem encephalitis (Bickerstaff's encephalitis) (chap 31). In: Vinken PJ, Bruyn GW, eds. *Handbook of Clinical Neurology*, vol 34. Amsterdam: North-Holland Publishing Company, 1978:605-9.

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Palatal myoclonus influenced by head posture

Sir: Palatal myoclonus is a segmental myoclonus syndrome which is often set apart from other movement disorders because of its persistence during sleep and throughout the life of the individual.¹⁻³ Recently, however, Jacobs *et al* have reported the case of a 19-year-old man who, following a head injury, developed palatal myoclonus that disappeared during sleep and varied with intensity during the day depending on which way he turned his head.⁴ The following case illustrates that palatal myoclonus may be triggered by head movements and again highlights the fact that palatal myoclonus may be an intermittent phenomenon.

For over 2 years a 32-year-old female had noticed repetitive clicking noises in her head. These were audible to observers over 5 metres away but were present only when she tilted her head to the left or right. The intensity of the noises varied from day to day but could not be heard at all during ear or throat infections, to which she was especially prone. There were no other central nervous system abnormalities on examination, but inspection of the throat revealed irregular, bilateral, jumping movements of the palate and pharynx with her head in 45° lateral

flexion (left or right), but not at other times. A clicking noise synchronous with the myoclonic jerks could be heard at a rate of approximately 120 per minute. After a few seconds both the jerking and the clicking noises could be started again by repeating the movement of lateral flexion. The clicking noises were assumed to be arising from the pharynx or from opening and closing movements of the mouth of the Eustachian tube.⁵ CT brain scan was normal.

The mechanism of generation of palatal myoclonus is unknown but post-mortem studies have demonstrated trans-synaptic hypertrophic degeneration of the inferior olivary nuclei due to a lesion of one of its afferent inputs, the dentato-olivary pathway.^{6,7} The switching on of palatal myoclonus in our patient by certain head movements suggests that other afferent pathways to the inferior olivary nuclei may be important in modifying the expression of this movement disorder; in this case proprioceptive input via the cuneate nuclei may be pertinent.

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References

- Marsden CD, Hallett M, Fahn S. The neurobiology and pathophysiology of myoclonus. In: Marsden CD, Fahn S, eds. *Movement Disorders*. London: Butterworth Scientific, 1980:217-9.
- Bonduelle M. The myoclonias. In: Vinken PJ, Bruyn GW, eds. *Handbook of Clinical Neurology*, Vol 6, *Diseases of the Basal Ganglia*. Amsterdam: North Holland Publishing Company, 1968.
- Guillain G. The syndrome of synchronous and rhythmic palato-paryngo-laryngo-oculo-diaphragmatic myoclonus. *Proc Soc Med* 1938;31:1031-8.
- Jacobs L, Newman RP, Bozian D. Disappearing palatal myoclonus. *Neurology* 1981;31:784-9.
- Chadwick DL, Macbeth R. Rhythmic palatal myoclonus. *J Laryngol Otol* 1953;67:301-7.
- Gautier JC, Blackwood W. Enlargement of the inferior olivary nucleus in association with lesions of the central tegmental tract and dentate nucleus. *Brain* 1961;84(3):341-61.
- Lapresse J. Rhythmic Palatal Myoclonus and the Dentato-Olivary Pathway. *J Neurol* 1979;220:223-30.
- Barr ML, Kiernan JA. *The Human Nervous System: An Anatomical Viewpoint*. 4th ed. Philadelphia: Harper and Row, 1983:95.

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