

complicated by purpuric rash. Duration varies from less than 1 week to several months, with occasional episodes of apparent recovery. Severity ranges from self-limited systemic illness (90% patients) to life-threatening illness with jaundice, renal failure, and hemorrhagic pneumonitis (Weil syndrome).

References.

1. AAP. Leptospirosis. In: Pickering LK, ed. Red Book: 2012 Report of the Committee on Infectious Diseases. 29th ed. Elk Grove Village, IL: AAP; 2012:469-71.

HEADACHE DISORDERS

THALAMIC FUNCTION AND VESTIBULAR MIGRAINE

Investigators at Universities of Naples and Salerno, Italy; and Maastricht University, the Netherlands, explored the functional response of vestibular neural pathways using whole-brain blood oxygen level dependent (BOLD) fMRI during caloric vestibular stimulation in 12 patients (mean age 31.2 +/- 5 yrs) with vestibular migraine (VM), in 12 healthy controls, and in a group of age- and sex-matched patients with migraine without aura (MwoA). In all subjects, caloric vestibular stimulation elicited activation in bilateral insular cortex (right > left), right parietal cortex, right thalamus, brainstem, and cerebellum. While all participants demonstrated this general pattern of response, patients with VM showed a significantly increased left medio-dorsal thalamic activation in response to an ipsilateral vestibular stimulation, relative to both healthy controls and patients with MwoA. The magnitude of the thalamic activation was positively correlated with the frequency of migraine attacks in patients with VM. (Russo A, Marcelli V, Esposito F, et al. Abnormal thalamic function in patients with vestibular migraine. *Neurology* 2014 Jun 10;82(23):2120-6).

COMMENTARY. Patients with VM have abnormal thalamic functional response to vestibular stimulation. These findings are consistent with the current view of VM as a migraine subtype clinically characterized by vestibular symptoms and correlated with interictal dysfunctional central vestibulo-thalamocortical processing [1]. Both structural and functional thalamic abnormalities are documented in patients with migraine [2].

References.

1. Russo A, et al. *Neurology*. 2014 Jun 10;82(23):2120-6.
2. Liu J, et al. *PLoS One*. 2012;7(12):e51250.

DEMYELINATING DISORDERS

EVALUATION OF REVISED DIAGNOSTIC DEFINITION OF MS

Investigators at Erasmus MC, Rotterdam, The Netherlands, evaluated the 2012 revised IPMSSG consensus definitions in a cohort of children with acquired demyelinating syndromes (ADS) prospectively followed for 2 years from Jan 2007. An MRI within 90 days after first disease onset was a criterion for inclusion. Of 82 children