

# Featured Research Studies

J Sleep Res. 2008 Oct 7. [Epub ahead of print]

## **Are patients with chronic fatigue syndrome just 'tired' or also 'sleepy'?**

Neu D, Hoffmann G, Moutrier R, Verbanck P, Linkowski P, LE Bon O.

University Hospital Brugmann, Sleep Laboratory, Université Libre de Bruxelles (U.L.B), Brussels, Belgium.

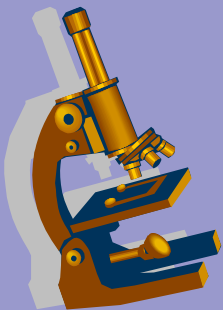
It is presently unclear whether chronic fatigue syndrome (CFS) patients exhibit daytime sleepiness in addition to fatigue. Both, fatigue, such as that seen in CFS patients, and excessive daytime sleepiness, such as in sleep apnea-hypopnea syndrome (SAHS), remain poorly understood. Both daytime conditions are generally related to unrefreshing sleep and show affective symptoms.

This study's objective was to contribute to the understanding of the relationship between fatigue and sleepiness in CFS patients not co-morbid for primary sleep or psychiatric disorders.

We compared 16 untreated CFS patients (mean age 32.8, all females) with 13 untreated SAHS (mean age 47.7, all females) patients and 12 healthy controls (mean age 32.2, all females). Objective sleepiness was measured using multiple sleep latency tests (MSLT). Subjective sleepiness and fatigue were assessed with the Epworth Sleepiness Scale and the Fatigue Severity Scale, respectively. Mean Sleep Latency (SL) on the MSLT was significantly shorter in SAHS patients than in CFS patients and CFS patients showed significantly shorter mean SL than matched controls but within normal range. Subjective sleepiness was greatest in SAHS patients and subjective fatigue was highest in CFS patients. Affective symptoms showed highest intensities in CFS patients.

While higher than the control group on all measures, compared to SAHS, the CFS group had higher subjective fatigue and lower subjective and objective sleepiness. Despite possible overlap in symptoms and signs of both daytime conditions, our data indirectly support the clinical distinction between fatigue and sleepiness.

PMID: 19021860 [PubMed - as supplied by publisher]



Med Hypotheses. 2008 Nov 12. [Epub ahead of print]

### **Clinical trials validate the severity of persistent Lyme disease symptoms.**

Cameron Dj.

First Medical Associates, 175 Main Street, Mt. Kisco, New York 10549, United States.

**BACKGROUND:** Persistent Lyme Disease Symptoms (PLDS) have included fatigue, headaches, poor concentration and memory, lightheadedness, joint pain, and mood disturbances. Evidence-based guidelines committees disagree over the severity of PLDS. The 2004 International Lyme and Associated Diseases Society (ILADS) concluded that PLDS are severe. The 2006 Infectious Disease Society of America (IDSA) guidelines committee concluded that PLDS are nothing more than the "aches and pains of daily living" and an ad hoc International Lyme group concluded that PLDS are "symptoms common in persons who have never had Lyme disease."

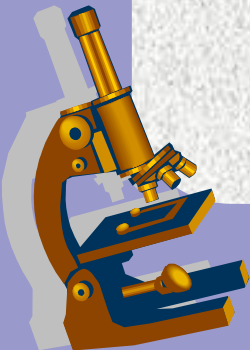
**HYPOTHESIS:** Clinical trials validate the severity of persistent Lyme disease symptoms.

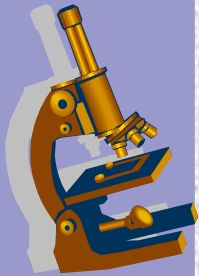
**EVALUATION OF THE HYPOTHESIS:** There are 22 standardized instruments used to measure the severity of PLDS among the four published National Institutes of Health (NIH) sponsored double-blind randomized placebo-controlled trials (RCTs).

**VALIDATING THE HYPOTHESIS:** All four NIH sponsored RCTs validate the severity of PLDS. PLDS are as severe as symptoms seen in other serious chronic illnesses, and result in a quality of life lower than for the general population as determined by 22 standardized measures of QOL, including fatigue, pain, role function, psychopathology, and cognition. None of the four RCTs support the IDSA hypothesis that PLDS are nothing more than "the aches and pains of daily living" nor the ad hoc International Lyme group conclusion that PLDS are "symptoms common in persons who have never had Lyme disease."

**IMPLICATIONS OF THE HYPOTHESIS:** If the QOL of life for these patients is as poor as for patients with other serious chronic diseases, their symptoms need to be addressed by their doctors. Studies differ as to the precise cause of PLDS, the most effective treatments, and whether a cure is possible. But the fact that there is disagreement is not a license for physicians to ignore or turn away patients complaining of PLDS, or to dismiss their symptoms as purely psychosomatic. For physicians, the goal or purpose of treating PLDS should be the same as their purpose in treating other chronic illnesses that result in a poor QOL: vigorous pursuit of a cure, and where a cure proves impossible, amelioration of patients' symptoms and suffering. Even if this hypothesis fails to be apply to more than a fraction of the total Lyme disease population, this still represents a significant number of patients, and these findings could address a neglected aspect of caring for patients with Lyme disease.

PMID: 19013025 [PubMed - as supplied by publisher]





Biol Res Nurs. 2008 Nov 17. [Epub ahead of print]

### **Hemodynamic Response to Postural Shift in Women with Multiple Chemical Sensitivities.**

McFetridge-Durdle J, Routledge F, Sampalli T, Fox R, Livingston H, Adams B.

Multiple chemical sensitivity (MCS) is a chronic condition prevalent in women; the symptoms are reproducible with repeated low-level chemical exposure. Evidence gathered through clinical observations suggests that women with MCS may be at risk for autonomic nervous system dysfunction as evidenced by abnormal heart rate and pulse pressure responses to exercise.

The primary objective of this study was to describe the hemodynamic response to postural shift in 17 women with MCS.

Using impedance cardiography, hemodynamic measures were taken while sitting and immediately upon standing. The hemodynamic response to standing was increased heart rate ( $p < .0001$ ), decreased stroke volume ( $p = .002$ ), decreased left ventricular ejection time ( $p < .0001$ ), increased diastolic blood pressure ( $p = .01$ ), and increased systemic vascular resistance ( $p = .002$ ).

Although this pattern of hemodynamic response was normal, the magnitude of the changes was considerably less than those observed previously in healthy participants. These findings warrant further investigation.

PMID: 19017670 [PubMed - as supplied by publisher]

This newsletter is for informational purposes and is not intended to replace the examination, diagnosis and treatment of a licensed physician and no such claims are inferred. Articles are not necessarily the opinion of MCS America and printing of others' opinions does not constitute endorsement. MCS America, Lourdes Salvador, Board Members, and associate members of MCS America will not be responsible for misuse of this information.

We welcome appropriate submissions for articles, letters-to-the-editor, poetry, artwork, jokes, cartoons, photos, and whatever else is physically printable. Submissions may be sent to [publisher@mcs-america.org](mailto:publisher@mcs-america.org). We attempt to publish monthly.



Contact Us: [admin@mcs-america.org](mailto:admin@mcs-america.org)

To subscribe to this free newsletter, send an email to: [subscriptions@mcs-america.org](mailto:subscriptions@mcs-america.org)