Reviewer's report

Title: Mechanisms underlying fatigue: a voxel-based morphometric study of chronic fatigue syndrome

Version: 1 Date: 17 September 2004

Reviewer: Massimo Filippi

Reviewer's report:

General

This is a timely, well-designed and well-written report of voxel-based morphometry changes in patients with chronic fatigue.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

None.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

I would suggest not to use CSF as an acronym for chronic fatigue syndrome, since CSF is typically used in neurology for cerebrospinal fluid.

1. Tables 1 and 2 can be omitted. The relevant pieces of information contained in table 1 can be presented in the text using descriptive statistics.

2. The abstract should contain a section on patients and methods.

3. MS cannot be excluded on the basis of a neurological examination. They should, at least, provide, results of conventional MRI scans.

Discretionary Revisions (which the author can choose to ignore)

1. Introduction is very long and somehow repetitive. It can be cut down significantly.

2. Were patients consecutively recruited? How many were screened and excluded? For which reasons? How other causes of fatigue were excluded? Please specify.

3. The amount of frontal lobe atrophy found in patients with chronic fatigue is very high. This would deserve a comment in the discussion.

4. I believe conventional MRI scans were obtained in these patients. The corresponding data should be presented.

5. There is an fMRI study of fatigue in MS (Filippi et al., NeuroImage 2002), which should be quoted and discussed.
What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

None.