

POST-EXERTIONAL MALAISE A DISCRIMINATING FEATURE OF CHRONIC FATIGUE SYNDROME/MYALGIC ENCEPHALOMYELITIS (CFS/ME)

¹Adrian H Heald, ²Basant Puri, ¹Annicc Mukherjee, ³Sanam Farman, ⁴Simon G Anderson, ⁵Raymond Perrin

¹Dept. of Endocrinology, Salford Royal Hospital, Salford; ²Imperial College, London; ³Mersey Deanery Psychiatry Rotation; ⁴Manchester Royal Infirmary; ⁵University of Central Lancashire, UK

Introduction

- Chronic fatigue syndrome/myalgic encephalomyelitis (CFS/ME) is characterized by severe, debilitating fatigue that is exacerbated by mental or physical exertion but does not improve with rest¹
- A self-report questionnaire was devised for clinical use more than 20 years ago by one of the co-authors to quantify the severity of the symptoms². This is based on the most common symptoms of the disorder and features a question on post-exertional malaise as part of the diagnostic process³

Aims

We aimed to determine if there is a link between the degree of post-exertional fatigue experienced by patients and the severity of CFS/ME, so as to better to characterize CFS/ME vs somatoform/affective disorder

Methods

133 people presenting consecutively with CFS/ME all completed a self-report questionnaire, the Perrin Questionnaire (PQCFSE)
An overall score was derived from 0 (most severe) - 10 (completely symptom free)

This was related to symptom severity rating after exertion, immediately and in the subsequent days. Categories were as follows

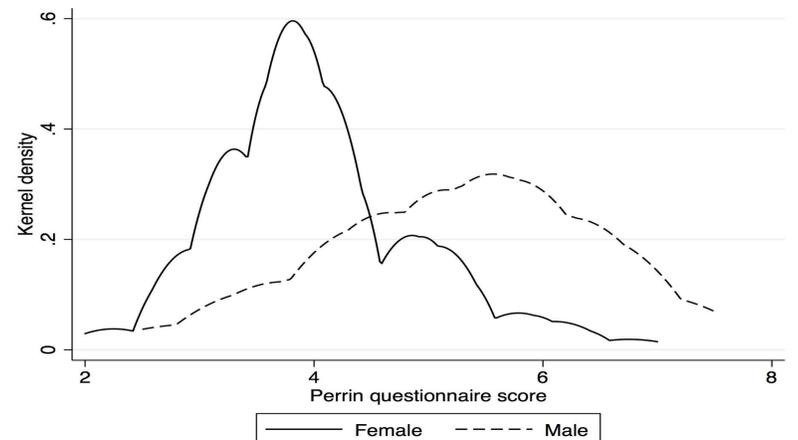
- Always improve
- Sometimes improve
- Always worsen
- Sometimes worsen
- Improve immediately after exercise but worsen within 72 hours

Image



Results II

The mean Perrin Score (a lower score presents more severe symptoms) was different by gender with **more severe overall symptom score in women (n=111) mean score 4.0 (95% Confidence Interval (95%CI) 3.8-4.2); as opposed to men (n=22) 5.3 (4.9-5.7) p<0.001.**

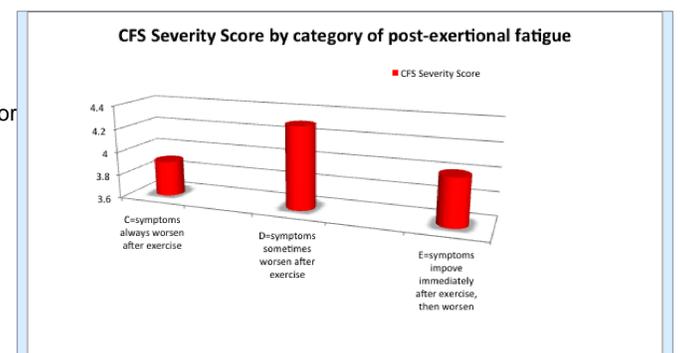


Gender difference in Perrin Score

For women, Category D (n=19) (symptoms sometimes worsen after exertion) was associated with less severe symptom profile on the Perrin Score 4.3 (4.0-4.7) (mean and 95% CI) in comparison to others; Category C (n=57) 3.9 (3.7-4.1), Category E (n=43) 4.0 (3.7-4.3). ANOVA: F 3.25; p 0.02 – see plot below.

There were only two patients in category B (symptoms sometimes improve after exertion) with no patients in category A (symptoms always improve after exertion).

ANOVA: F 3.25; p 0.02 for Category D vs other categories



Conclusion

Women were more severely affected than men by as rated by the Perrin Score

Women who experienced worsening of symptoms sometimes after exertion had a less severe symptom severity overall than women who always felt worse after exertion or who initially felt better after exertion

Patient ratings of experienced post-exertional malaise may be a way of discriminating between severity categories of CFS/ME in an everyday clinical setting

Whether post-exertional fatigue can be a discriminant factor for CFS/ME vs other potential diagnoses remains to be determined

References

- Afari N, Buchwald D. Chronic fatigue syndrome: a review. Am J Psychiatry 2003; 160: 221–36.
- Hives L, Bradley A, Richards J, et al? A diagnostic accuracy study. BMJ Open 2017;0:e017521. doi:10.1136/bmjopen-2017-017521.
- National Institute for Health and Care Excellence (NICE). Chronic fatigue syndrome/myalgic encephalomyelitis (or encephalopathy): diagnosis and management of chronic fatigue syndrome/myalgic encephalomyelitis (or encephalopathy) in adults and children. London: NICE, 2007.