Fatigue in cystic fibrosis: A novel prospective study investigating subjective and objective factors associated with fatigue

Dr. Nabil 3383 Jarad nabil.jarad@uhbristol.nhs.uk MD ¹, Dr. Iara 3384 Sequeiros iaraseq@hotmail.com MD ¹, Ms. Prachi 3385 Patel redevils30@hotmail.com ¹, Ms. Kathrin 3386 Bristow iaraseq@hotmail.com ¹ and Mrs. Zoe 3387 Sund iaraseq@hotmail.com . ¹ Respiratory, University Hospitals Bristol NHS Foundation Trust, Bristol, United Kingdom .

Fatigue is a debilitating symptom in cystic fibrosis (CF) patients. Although commonly reported by CF patients, an effective treatment for this symptom has not yet been found. Factors associated with fatigue in CF have also not been investigated. We conducted a prospective case–control study in adult CF patients. All patients were chronically infected with Pseudomonas aeruginosa and were enrolled during disease stability. A sex and age-matched control group was also recruited. Subjective assessment included 3 questionnaires: the Chalder fatigue questionnaire, St Mary’s Hospital sleep questionnaire (SQ), and the scaled General Health and Hillier questionnaire (GHQ). Patients with CF had spirometry, body mass index (BMI), haemoglobin level, C-reactive protein, and rate of pulmonary exacerbations assessed. The controls completed the 3 questionnaires and had BMI measured. 44 CF patients and 34 controls were studied. Female CF patients received more intravenous antibiotic days than male patients. Fatigue score was significantly greater in CF patients than controls (P=0.038 for females and P=0.048 for males), but did not differ between female and male CF patients. The scores for the SQ and the GHQ did not differ between the study groups. The fatigue score correlated with the SQ score in CF patients (P<0.0001), but not in controls. In CF patients and controls, a close correlation was found between the fatigue score and the total and domain-specific GHQ scores, (P<0.0001 for CF patients and P=0.001 for controls). For CF patients, no correlation was found between the fatigue score and any of the objective parameters studied.