



The Carousel Network

**Chronic Neuroimmune Disease
Information and Support for Sonoma County**
122 Calistoga Rd, #216
Santa Rosa, CA 95409
www.cndsinfo.net

Abstracts:

**Chronic Fatigue Syndrome
And
Fibromyalgia**

There is a great deal of overlap between the symptoms and neurological findings of those diagnosed with chronic fatigue syndrome and fibromyalgia. Those meeting the criteria of both disorders tend to be more impaired, less likely to be able to work, and access health services more often. The following abstracts provide some information on the findings of various research studies to help illustrate that CFS and FM are not always an either/or diagnosis.

The Carousel Network (TCN) offers information on the various diseases and disorders associated with chronic neuroimmune diseases, such as chronic fatigue syndrome, fibromyalgia, multiple chemical sensitivity, autoimmune thyroid disease, etc. The information is intended to help patients and caregivers make informed decisions about the patient's health, diagnostic testing, and treatment in conjunction with their health care practitioners. TCN does not diagnose patients nor recommend specific medical or palliative treatments.

The Carousel Network is a 501(c)3 nonprofit supported by memberships and donations.

Membership is \$20/year; make checks payable to The Carousel Network, POB 366, Fulton CA 95439-0366.

C-2 / Rev. 01/23/01

Chronic fatigue, chronic fatigue syndrome, and fibromyalgia. Disability and health-care use.

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Med Care 1996 Sep;34(9):924-30

OBJECTIVES: Disabling chronic fatigue that does not meet criteria for chronic fatigue syndrome (CFS) or fibromyalgia (FM) is a condition thought to be associated with substantial disability and an apparently high use of health-care services. The authors compare patients who have chronic fatigue, CFS, FM, or CFS and FM together (CFS+FM) on employment status, self-reported disability, number of medical care visits, type of services obtained, and other diagnoses received.

METHODS: The authors studied 402 patients from a university-based chronic fatigue clinic. All patients underwent an initial structured diagnostic assessment. One hundred forty-seven patients met case criteria for CFS, 28 for FM, 61 for CFS+FM, and 166 fell in the residual chronic fatigue group. Of these patients, 388 completed a follow-up questionnaire an average of 1.7 years later. Chi-squared tests and analysis of variance were used to compare groups on follow-up measures of health-care use and disability.

RESULTS: Patients with chronic fatigue, CFS, FM, and CFS+FM were similar in terms of disability and health-care use, though those with CFS+FM were significantly more likely to be unemployed and to use more chiropractic and "other" provider services. Rates of unemployment ranged from 26% (chronic fatigue) to 51% (CFS+FM). Overall, patients reported a mean of 21 visits to a wide variety health-care providers during the previous year, with no significant differences between groups.

CONCLUSIONS: Chronic fatigue, CFS, and FM are associated with considerable personal and occupational disability and low rates of employment. The potentially large economic burden of these disorders underscores the need for accurate estimates of direct and indirect costs, the relative contribution of individual factors to disability, and the need to develop targeted rehabilitation programs.

Fibromyalgia, chronic fatigue syndrome, and myofascial pain.

Bennett R

Department of Medicine, Oregon Health Sciences Center, Portland 97201, USA.

Curr Opin Rheumatol 1998 Mar;10(2):95-103

Epidemiologic studies continue to provide evidence that fibromyalgia is part of a spectrum of chronic widespread pain. The prevalence of chronic widespread pain is several times higher than fibromyalgia as defined by the 1990 American College of Rheumatology guidelines. There is now compelling evidence of a familial clustering of fibromyalgia cases in female sufferers; whether this clustering results from nature or nurture remains to be elucidated. A wide spectrum of fibromyalgia-associated symptomatology and syndromes continues to be described. During the past year the association with interstitial cystitis has been explored, and neurally mediated hypotension has been documented in both fibromyalgia and chronic fatigue syndrome. Abnormalities of the growth hormone-insulin-like growth factor-1 axis have been also documented in both fibromyalgia and chronic fatigue syndrome. The commonly reported but anecdotal association of fibromyalgia with whiplash-type neck trauma was validated in a report from Israel. However, unlike North America, 100% of Israeli patients with posttraumatic fibromyalgia returned to work. Basic research in fibromyalgia continues to pinpoint abnormal sensory processing as being integral to understanding fibromyalgia pain. Drugs such as ketamine, which block N-methyl-D-aspartate receptors (which are often upregulated in central pain states) were shown to benefit fibromyalgia pain in an experimental setting. The combination of fluoxetine and amitriptyline was reported to be more beneficial than either drug alone in patients with fibromyalgia. A high prevalence of autoantibodies to cytoskeletal and nuclear envelope proteins was found in chronic fatigue syndrome, and an increased prevalence of antipolymer antibodies was found in symptomatic silicone breast implant recipients who often have fibromyalgia.

Co-existence of chronic fatigue syndrome with fibromyalgia syndrome in the general population. A controlled study.

White KP, Speechley M, Harth M, Ostbye T.

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OBJECTIVE: To determine the proportion of adults with fibromyalgia syndrome (FMS) in the general population who also meet the 1988 Centre for Disease Control (CDC) criteria for chronic fatigue syndrome (CFS).

METHODS: Seventy-four FMS cases were compared with 32 non-FMS controls with widespread pain and 23 with localized pain, all recruited in a general population survey.

RESULTS: Among females, 58.0% of fibromyalgia cases met the full criteria for CFS, compared to 26.1% and 12.5% of controls with widespread and localized pain, respectively ($p=0.0006$). Male percentages were 80.0, 22.2, and zero, respectively ($p=0.003$). Compared to those with FMS alone, those meeting the case definitions for both FMS and CFS reported a worse course, worse overall health, more dissatisfaction with health, more non-CFS symptoms, and greater disease impact. The number of total symptoms and non-CFS symptoms were the best predictors of co-morbid CFS.

CONCLUSIONS: There is significant clinical overlap between CFS and FMS.

Overlapping conditions among patients with chronic fatigue syndrome, fibromyalgia, and temporomandibular disorder.

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BACKGROUND: Patients with chronic fatigue syndrome (CFS), fibromyalgia (FM), and temporomandibular disorder (TMD) share many clinical illness features such as myalgia, fatigue, sleep disturbances, and impairment in ability to perform activities of daily living as a consequence of these symptoms. A growing literature suggests that a variety of comorbid illnesses also may commonly coexist in these patients, including irritable bowel syndrome, chronic tension-type headache, and interstitial cystitis.

OBJECTIVE: To describe the frequency of 10 clinical conditions among patients with CFS, FM, and TMD compared with healthy controls with respect to past diagnoses, degree to which they manifested symptoms for each condition as determined by expert-based criteria, and published diagnostic criteria.

METHODS: Patients diagnosed as having CFS, FM, and TMD by their physicians were recruited from hospital-based clinics. Healthy control subjects from a dermatology clinic were enrolled as a comparison group. All subjects completed a 138-item symptom checklist and underwent a brief physical examination performed by the project physicians.

RESULTS: With little exception, patients reported few past diagnoses of the 10 clinical conditions beyond their referring diagnosis of CFS, FM, or TMD. In contrast, patients were more likely than controls to meet lifetime symptom and diagnostic criteria for many of the conditions, including CFS, FM, irritable bowel syndrome, multiple chemical sensitivities, and headache. Lifetime rates of irritable bowel syndrome were particularly striking in the patient groups (CFS, 92%; FM, 77%; TMD, 64%) compared with controls (18%) ($P<.001$). Individual symptom analysis revealed that patients with CFS, FM, and TMD share common symptoms, including generalized pain sensitivity, sleep and concentration difficulties, bowel complaints, and headache. However, several symptoms also distinguished the patient groups.

CONCLUSIONS: This study provides preliminary evidence that patients with CFS, FM, and TMD share key symptoms. It also is apparent that other localized and systemic conditions may frequently co-occur with CFS, FM, and TMD. Future research that seeks to identify the temporal relationships and other pathophysiologic mechanism(s) linking CFS, FM, and TMD will likely advance our understanding and treatment of these chronic, recurrent conditions.

Review of juvenile primary fibromyalgia and chronic fatigue syndrome.

Breau LM, McGrath PJ, Ju LH.

Department of Psychology, Dalhousie University, Halifax, Canada. *J Dev Behav Pediatr* 1999 Aug;20(4):278-88

This article reviews the current literature on childhood fibromyalgia and chronic fatigue syndrome. In doing so, it questions assumptions about the presumed nature of the disorders—that they are distinct from each other and are duplicates of their adult counterparts. It also attempts to synthesize the available data to reach some preliminary judgments about these disorders: that fibromyalgia and chronic fatigue syndrome may be related in children and may not be duplicates of the adult disorders; that psychological and psychosocial factors are unlikely contributors to the etiology of these disorders; and that the evidence is increasingly pointing to a role for genetic factors in their etiology. A discussion of the research into treatments for childhood fibromyalgia and chronic fatigue syndrome highlights the lack of well-designed, controlled studies. Finally, directions for future research are offered where results of the current literature are unclear.

The hypothalamic-pituitary-adrenal stress axis in fibromyalgia and chronic fatigue syndrome.

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HPA axis abnormalities in FM, CFS, and other stress-related disorders must be placed in a broad clinical context. We know that interventions providing symptomatic improvement in patients with FM and CFS can directly or indirectly affect the HPA axis. These interventions include exercise, tricyclic anti-depressants, and serotonin reuptake inhibitors. There is little direct information as to how the specific HPA axis perturbations seen in FM can be related to the major symptomatic manifestations of pain, fatigue, sleep disturbance, and psychological distress. Since many of these somatic and psychological symptoms are present in other syndromes that exhibit HPA axis disturbances, it seems reasonable to suggest that there may be some relationship between basal and dynamic function of the HPA axis and clinical manifestations of FM and CFS.

Fibromyalgia, chronic fatigue syndrome, and myofascial pain.

Bennett R.

Department of Medicine, Oregon Health Sciences Center, Portland 97201, USA. *Curr Opin Rheumatol* 1998 Mar;10(2):95-103

Epidemiologic studies continue to provide evidence that fibromyalgia is part of a spectrum of chronic widespread pain. The prevalence of chronic widespread pain is several times higher than fibromyalgia as defined by the 1990 American College of Rheumatology guidelines. There is now compelling evidence of a familial clustering of fibromyalgia cases in female sufferers; whether this clustering results from nature or nurture remains to be elucidated. A wide spectrum of fibromyalgia-associated symptomatology and syndromes continues to be described. During the past year the association with interstitial cystitis has been explored, and neurally mediated hypotension has been documented in both fibromyalgia and chronic fatigue syndrome. Abnormalities of the growth hormone-insulin-like growth factor-1 axis have been also documented in both fibromyalgia and chronic fatigue syndrome. The commonly reported but anecdotal association of fibromyalgia with whiplash-type neck trauma was validated in a report from Israel. However, unlike North America, 100% of Israeli patients with posttraumatic fibromyalgia returned to work. Basic research in fibromyalgia continues to pinpoint abnormal sensory processing as being integral to understanding fibromyalgia pain. Drugs such as ketamine, which block N-methyl-D-aspartate receptors (which are often upregulated in central pain states) were shown to benefit fibromyalgia pain in an experimental setting. The combination of fluoxetine and amitriptyline was reported to be more beneficial than either drug alone in patients with fibromyalgia. A high prevalence of autoantibodies to cytoskeletal and nuclear envelope proteins was found in chronic fatigue syndrome, and an increased prevalence of antipolymer antibodies was found in symptomatic silicone breast implant recipients who often have fibromyalgia.