

OVERLAPPING DISORDERS: CHRONIC FATIGUE SYNDROME, FIBROMYALGIA SYNDROME MULTIPLE CHEMICAL SENSITIVITY & GULF WAR SYNDROME

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Chronic Fatigue Syndrome (CFS), also known as Chronic Fatigue and Immune Dysfunction Syndrome (CFIDS), Fibromyalgia Syndrome (FMS), Multiple Chemical Sensitivity (MCS), and Gulf War Syndrome (GWS) share many of the same symptoms, as described below, and often occur together, but they differ greatly in the methods used for their diagnosis and treatment. Which of these diagnoses a person receives usually depends on the type of specialist he or she sees. CFS is most likely to be diagnosed by internists or infectious disease specialists, FMS by rheumatologists, and MCS by occupational and environmental medicine physicians. Gulf War Syndrome is seen mostly by military and VA physicians but--even though the top 10 symptoms they report are all common to CFS, FMS and MCS--they call them "unexplained" and refuse to even screen for any of these disorders.

CFS is defined by the US Centers for Disease Control "for research purposes" as persistent or relapsing fatigue lasting greater than six months that is unexplained by any other physical disorder. This fatigue also must occur in combination with at least four of the following: 1) short term memory loss, 2) sore throat, 3) tender lymph nodes in neck or armpit, 4) muscle pain, 5) joint pain without swelling or redness, 6) headaches, 7) unrefreshing sleep, or 8) "malaise" that lasts more than 24 hours after exercise. CFS may develop at any age but usually starts in mid-life, often in conjunction with a flu-like illness, and is diagnosed more frequently in women. Numerous biochemical abnormalities have been identified in CFS patients but none as yet are considered diagnostic. Many treatments are available, mostly for specific symptoms or deficiencies, but outcomes vary and no cure is known. Avoiding stressors of all kinds is primary.

FMS is defined by chronic muscle and joint pain on both sides of the body, pain above and below the waist, and pain anywhere along the spine. It is usually associated with disrupted sleep, chronic fatigue, cognitive problems, and many other variable symptoms. According to the American College of Rheumatology, FMS affects about 3% of the adult U.S. population and, like CFS and MCS, is much more common in women. The diagnosis is confirmed with a brief physical exam that involves the testing of 18 pressure (or tender) points. As with CFS and MCS, the onset of FMS may be gradual or sudden. Sudden onset is usually associated with physical injury or trauma, such as a car accident or difficult childbirth, although FMS also may be initiated by infections or chemical and drug exposures. Treatments focus on relieving pain, avoiding stress, improving sleep and correcting hormonal imbalances. Outcomes vary and no cure-all is known.

MCS, like CFS, is diagnosed by the patient's history and the consideration of other possible chemical sensitivity disorders like lupus and porphyria. It is defined by multiple symptoms affecting multiple organs (such as the nose, eyes, lungs, and central nervous system) that wax and wane in response to multiple chemical exposures at or below previously tolerated levels. MCS usually starts from a chronic (long lasting) or acute (short but high level) exposure to one or more "sensitizing" toxins such as formaldehyde, the pesticide Dursban, and carbonless copy paper. This initial sensitivity then spreads, with many other low-level exposures triggering similar symptoms. These triggers may be inhaled (like perfume), ingested (like food, alcohol and drugs), or absorbed by the skin (like detergent residues and pesticides). A random survey of 4,000 adults in California by the state's Department of Health Services in 1995 found 15.9% complained of being "unusually sensitive" to "everyday chemicals" in common household products and 6.3% said they'd been given the diagnosis of MCS or Environmental Illness by a doctor. Similar percentages were found again in 1996 when the same questions were asked of 4,000 others. Treatment focuses on avoiding and controlling the exposures that trigger symptoms, combined with exercise and sauna as tolerated, and nutritional supplements to fix deficiencies.

CFS, FMS and MCS occur together in approximately 1/3 to 2/3 of all cases, according to the first study of this overlap* done in 1994. The MCS overlap was perfectly symmetrical, with up to 67% of both CFS and FMS patients reporting a worsening of symptoms following exposure to air pollution, cigarette smoke, solvent fumes or perfumes. The FMS overlap also appears symmetrical, with 67% of both MCS and CFS patients reporting muscle weakness and 63% to 77% complaining of muscle and joint pain. And despite using an older (1988) and narrower definition of CFS, the study found CFS in 70% of FMS and 30% of MCS patients. (Only two CFS symptoms were significantly more common in FMS than MCS: painful lymph nodes and post-exertional fatigue.) This extensive overlap highlights the need to screen patients for all three disorders whenever any one is suspected.

GWS is less well defined and refers to the cluster of undiagnosed symptoms of unknown cause that have been reported by over 10% of the US veterans involved in the 1991 war against Iraq (more than 80,000 troops to date). Although studies published by the Department of Defense, Department of Veterans' Affairs, National Institute of Medicine, and the Centers for Disease Control deny the existence of any "unique syndrome," the symptoms most commonly reported by ill veterans--including chronic fatigue, muscle and joint pain, sleep disturbances, and neurocognitive problems--are almost identical to those seen in CFS, FMS and MCS. Indeed, two unpublished VA studies show 28% of Gulf War veterans with CFS, 18% with FMS and 12% with MCS.** Most independent researchers attribute GWS symptoms to pesticide, drug and chemical weapons exposures, while others report finding treatable infections of *Leishmania tropica* (a sand fly fever) and *Mycoplasma fermentans* (incognitus).

Some researchers believe that Gulf War veterans and others who meet the diagnostic criteria for more than one of CFS, FMS and/or MCS may all be suffering from variations of one underlying but as yet undefined syndrome. Most, for example, seem to share heightened sensitivity to a diverse range of stresses, from physical exertion and infection to environmental exposures. In addition to chemical sensitivity, they often also report heightened sensitivity to bright lights, loud noises, hot and/or cold weather, and/or touch. Until further research clarifies the nature of this overlap, however, most physicians, insurers, attorneys and support groups continue to regard CFS, FMS, MCS and GWS as separate and distinct conditions.

It is very important that anyone suspected of having any one of these overlapping syndromes be screened for all of the others as well as for other possible underlying complications and causes of their symptoms such as lupus and porphyria. Ignoring this process of differential diagnosis may have serious health consequences, as health care providers may overlook potentially treatable conditions that present with similar symptoms or recommend inappropriate treatments. Since drug sensitivities are common in all these disorders, for example, physicians who prescribe medications for CFS/FMS/MCS patients are advised to start at lower than normal dosages and increase slowly only if they are well tolerated. Appropriate diagnosis and thorough documentation of all symptoms are also critical for patients seeking insurance coverage, Social Security and other disability benefits, workplace accommodation and/or workers' compensation.

For additional information on the diagnosis and treatment of these overlapping disorders and referral services, please contact the following national organizations:

CFIDS Association of America
PO Box 220398, Charlotte, NC 28222-0398
800-442-3437, www.cfids.org

Fibromyalgia Network
PO Box 31750, Tuscon, AZ 85751-1750
800-853-2929 www.fmnetnews.com

MCS Referral & Resources
10145 Falls Rd, Lutherville MD 21093
410-889-6666, www.mcsrr.org

National Gulf War Resource Center
3027 Walnut St, Kansas City MO 64108
www.ngwrc.com

* "Comparison of patients with chronic fatigue syndrome, fibromyalgia and multiple chemical sensitivities," Buchwald, Dedra and Garrity, Deborah; *Archives of Internal Medicine*; 1994, 154:2049-53

** US Dept of VA: Environmental Hazards Research Centers' Annual Reports for 1996 (from MCS R&R)