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**SPA Specialty Referral Guideline**  
**Chronic Fatigue Syndrome Referral Indications**

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## **I. Introduction to Chronic Fatigue Syndrome (CFS)**

Chronic fatigue syndrome, or CFS, is a debilitating and complex disorder characterized by extreme exhaustion that does not improve with bed rest, and may be exacerbated by physical or mental activity. Persons with CFS most often function at a substantially lower level of activity than they were capable of before the onset of the illness. In addition to these key defining characteristics, patients report various nonspecific symptoms, including weakness, muscle pain, impaired memory and/or mental concentration, insomnia, and post-exertional fatigue lasting more than 24 hours. In some cases, CFS can persist for years. The cause of CFS has not been identified and no specific pathognomonic tests are available. **A diagnosis of CFS is based on exclusion.** This means that before arriving at a diagnosis of CFS, the clinician has ruled out any other disease or condition that may be causing fatigue.

## **II. Definition**

A great deal of debate has surrounded the issue of how best to define CFS. In an effort to resolve these issues, an international panel of CFS research experts convened in 1994 to draft a definition of CFS for the Centers for Disease Control and Prevention (CDC) that would be useful both to researchers studying the illness and to clinicians diagnosing it. In essence, in order to receive a diagnosis of chronic fatigue syndrome, a patient must satisfy two criteria:

- A) Have severe chronic fatigue of six months or longer duration with other known medical conditions excluded; and
- B) Concurrently have four or more of the following symptoms:
  - a) substantial impairment in short-term memory or concentration;
  - b) sore throat;
  - c) tender lymph nodes;
  - d) muscle pain;
  - e) multi-joint pain without swelling or redness;
  - f) headaches of a new type, pattern or severity;
  - g) unrefreshing sleep;
  - h) post-exertional malaise lasting more than 24 hours.

The symptoms must have persisted or recurred during six or more consecutive months of illness and must not have predated the fatigue.

## **III. Risk Factors for CFS**

- A) People of every age, gender, ethnicity, and socioeconomic class can have CFS.
- B) CFS affects women at four times the rate of men – possibly because of biological, psychological, and social influences.
- C) Although CFS is much less common in children than in adults, children can develop the illness, particularly during the teen years.

#### **IV. Defining CFS Symptoms**

CFS is marked by extreme fatigue that has lasted at least six months; is not the result of ongoing effort; is not substantially relieved by rest; and causes a substantial reduction in daily activities.

- A) In addition to fatigue, CFS includes eight characteristic associated symptoms:
- a) post-exertional malaise (relapse of symptoms after physical or mental exertion) lasting more than 24 hours;
  - b) unrefreshing sleep;
  - c) substantial impairment in memory/concentration;
  - d) muscle pain;
  - e) pain in multiple joints;
  - f) headaches of a new type, pattern or severity;
  - g) sore throat; and
  - h) tender neck or armpit lymph nodes.

Symptoms and their consequences can be severe. CFS can be as disabling as multiple sclerosis, lupus, rheumatoid arthritis, congestive heart failure and similar chronic conditions. Symptom severity varies from patient to patient and may vary over time for an individual patient.

#### **V. Diagnosis of CFS**

- A) There are no pathognomonic physical signs that identify CFS.
- B) There are no pathognomonic diagnostic laboratory tests for CFS.
- C) A physician must carefully evaluate people who suffer the symptoms of CFS because many treatable medical and psychiatric conditions are hard to distinguish from CFS.
- D) Research conducted by the Centers for Disease Control and Prevention (CDC) indicates that less than 20% of CFS patients in this country have been diagnosed.

The diagnosis of CFS is generally made when a patient has a typical history, and no abnormalities can be detected on the physical examination or screening tests. It is not necessary to perform expensive neuroimaging. MR imaging and SPET scan abnormalities seem to occur more frequently in patients with CFS. These findings are of unknown significance and do not warrant a change in diagnosis and/or management.

## **VI. Conditions That Exclude the Diagnosis of CFS**

- A) Any active medical condition that may explain the presence of CFS such as untreated hypothyroidism, sleep apnea, narcolepsy, and iatrogenic conditions such as side effects of medications.
- B) Any past or current diagnosis of a major depressive disorder with psychotic or melancholic features:
  - a) Bipolar affective disorders
  - b) Schizophrenia of any sub-type
  - c) Delusional disorders of any subtype
  - d) Dementias of any subtype
  - e) Anorexia nervosa
  - f) Or bulimia nervosa
- C) Alcohol or other substance abuse, occurring within 2 years of the onset of chronic fatigue and any time afterwards.
- D) Severe obesity as defined by body mass index [body mass index = weight in kilograms / (height in meters) squared equal to or greater than 45]. Note: body mass index values vary considerably among different age groups and populations. No “normal” or “average” range of values can be suggested in a fashion that is meaningful. The range of 45 or greater was selected because it clearly falls within the range of severe obesity.
- E) Any unexplained abnormality detected on examination or other testing that strongly suggests an exclusionary condition must be resolved before attempting further classification.

## **VII. Recommended Lab Testing**

After a thorough physical examination and history, the patient is asked to keep records of temperature and weight. CFS is largely a diagnosis of exclusion, therefore documentation of temperature elevations or significant weight fluctuations would point to other potential organic causes, such as subacute congestive heart failure, subacute infections, autoimmune disease or possible occult malignancy. The following lab tests are recommended:

- A) Complete blood count with a differential count;
- B) Erythrocyte sedimentation rate;
- C) Chemistry screen;
- D) Thyroid stimulating hormone level; and,
- E) Other tests when clinically indicated.

Expensive immunologic tests and serologies are not useful. If the history is non-specific and the above screening tests are negative routine testing for EBV, CMV, Lyme disease, or antinuclear antibodies screening is not necessary. In a low pretest probability setting,

any positive test is more than likely to be a false positive result. Individually, specific tests may be indicated to evaluate a particular issue in the patients H&P.

### **VIII. Treatment of CFS**

- A) Since there is no known cure for CFS, treatment is aimed at symptom relief and improved function. A combination of drug and nondrug therapies is usually recommended.
- B) No single therapy exists that helps all CFS patients.
- C) Lifestyle changes, including prevention of overexertion, reduced stress, dietary restrictions, gentle stretching and nutritional supplementation, are frequently recommended in addition to drug therapies used to treat sleep, pain and other specific symptoms.
- D) Carefully supervised physical therapy may also be part of treatment for CFS. However, symptoms can be exacerbated by overly ambitious physical activity. A very moderate approach to exercise and activity management is recommended to avoid overactivity and to prevent deconditioning.
- E) Although health care professionals may hesitate to give patients a diagnosis of CFS for various reasons, it is important to receive an appropriate and accurate diagnosis to guide treatment and further evaluation.
- F) Delays in diagnosis and treatment are thought to be associated with poorer long-term outcomes. For example, CDC's research has shown that those who have CFS for two years or less were more likely to improve. It is not known if early intervention is responsible for this more favorable outcome; however, the longer a person is ill before diagnosis, the more complicated the course of the illness appears to be.

### **IX. Possible Causes of CFS**

- A) Despite an intensive, nearly 20-year search, the cause of CFS remains unknown. Many different infectious agents and physiologic and psychological causes have been considered, and the search continues.
- B) Much of the ongoing research into a cause has centered on the roles of the immune, endocrine and nervous systems may play in CFS.
- C) More recently, interactions among these factors are under evaluation. Genetic and environmental factors may play a role in developing and/or prolonging the illness, although more research is needed to confirm this. CDC is applying cutting-edge genomic and proteomic tools to understand the origins and pathogenesis of CFS.

- D) CFS is not caused by depression, although the two illnesses often coexist, and many patients with CFS have no psychiatric disorder.

#### **X. Recovery from CFS**

- A) CFS affects each individual differently. Some people with CFS remain homebound and others improve to the point that they can resume work and other activities, even though they continue to experience symptoms.
- B) Recovery rates for CFS are unclear. Improvement rates varied from 8% to 63% in a 2005 review of published studies, with a median of 40% of patients improving during follow-up. However, full recovery from CFS may be rare, with an average of only 5% to 10% sustaining total remission.

#### **XI. Guidelines for Referral**

- A) All patients with symptoms suggestive of CFS should have a thorough history, physical evaluation and laboratory testing completed to exclude other potential confounding conditions (see Sections V and VI) prior to referral for specialty consultation. Once a diagnosis of CFS is strongly considered, an infectious disease consultation would be appropriate.

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**APPROVAL:**

  
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