Tired of Feeling Tired:
A Practical Approach to CFS

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How is CFS diagnosed?

Chronic fatigue syndrome (CFS) is a condition of excessive fatigue, cognitive impairment and other varied symptoms. It is classified by the World Health Organization as a disease of the nervous system of unknown etiology and may last months or years, causing severe disability.[1] A detailed symptom-specific history is the most helpful tool in characterizing patients with CFS. It is often useful to develop an insight into the patient's expectations and objectives, such as insurance issues, disability claims, *etc*. There are important alternative causes of chronic fatigue to consider which, if present, would preclude the diagnosis of CFS (Table 1).

What investigations should be performed if CFS is suspected?

Routine investigations might include:

- a complete blood count,
- erythrocyte sedimentation rate,
- measures of renal function,
- liver function,
- electrolytes,
- thyroid stimulating hormone and
- urinalysis.

It is not recommended to routinely investigate

Judith's case:

- Judith, a 50-year-old woman who was evaluated by you as part of a multi-disciplinary group assessment for musculoskeletal pain and overwhelming fatigue and weakness for at least six years, presents to your office
- She describes musculoskeletal pain in her neck, shoulders and top of her back. She says that it is present all the time. She reports further fleeting pains that typically last a day or so in her shoulders, wrists, hips, knees and feet
- She says that she develops fatigue with minimal activity. She describes the fatigue and weakness as being overwhelming
- She says that she needs between 10 hours to 12 hours of sleep per night and often sleeps an additional three hours in the afternoon, without feeling fully refreshed
- Her verbatim description includes:
  - "I can get out of bed and within an hour, I am fatigued enough to go back to bed"
  - "I feel like I'm wearing a suit of armor that is weighing me down and it is an effort to move around"
  - "I feel that I have the flu everyday, often with headaches, nausea, dizziness, weakness and fevers"
  - "The more I do, the worse I feel"
  - "On really bad days, I feel like every nerve in my body is on edge. It is like every nerve is biting on a piece of tin foil and giving me a jolting feeling all over my body"

For more on Judith, go to page 104.

Judith's case cont'd:

- After a thorough physical and psychological assessment, Judith enters an intensive interdisciplinary program of cognitive behaviour therapy that includes graded activity and exercise, as well as cognitive behavioural psychotherapy
- In the beginning stages of therapy, much of the treatment is done in her home and is eventually moved to a community facility to "demedicalize" her fatigue and to gradually reintroduce her to a normal environment
- After about 12 months of treatment, Judith says she still tires more easily than prior to developing the illness. However, she no longer feels the overwhelming fatigue and weakness she previously experienced. She has returned to employment in a satisfactory position and reports a much improved level of functioning in her personal life

Table 1

Center for Disease Control case definition of CFS (1994)

Fatigue of new or recent onset	• Lasting at least 6 months • Not the result of organic disease • Not the result of continuing exertion • Not relieved by rest • Results in substantial reduction of previous activities
4 or more of the following are present	• Impaired memory or concentration • Sore throat, tender cervical or axillary lymph nodes • Pain in muscles, several joints • New headaches • Unrefreshing sleep • Malaise after exertion
Exclusions (medical condition explaining the fatigue)	• Major depressive disorder or bipolar disorder • Schizophrenia • Dementia or delusional disorder • Anorexia nervosa • Bulimia nervosa • Alcohol or substance abuse • Severe obesity

for:

- Epstein-Barr virus,
- toxins,
- Lyme disease,
- immune disorders,
- neural imaging studies,
- auto-antibodies or
- muscle enzymes.

How should CFS be treated?

Both cognitive behavioural therapy and graded exercise therapy have been demonstrated in randomized control trials to be effective treatments for this condition.

The central components of cognitive behaviour therapies include:

- an explanation of the etiological model motivation for therapy,
- challenging and changing fatigue-related cognitions,
- achievement and maintenance of a basic amount of physical activity,
- gradual increases in physical activity,
- planning work rehabilitation and other personal activity rehabilitation and
- teaching patients how to acquire an increased perception of control over their symptoms.

Predictors of poor outcome in cognitive behavioural therapy are:

- membership in a self-help group,
- receipt of a sickness benefit,
- claiming a disability-related benefit,
- low sense of control,
- strong focus on symptoms and
- a pervasively passive activity pattern.

In randomized controlled trials, cognitive behavioural therapy has been demonstrated to be efficacious for many individuals. In the authors' experience, cognitive behavioural therapy in appropriately selected patients with CFS has successfully allowed approximately 60% of patients to get off their chronic disability benefits and return to work, earning more than they could on disability.

There are a number of ineffective treatments that have been tried over the years. These include:

- corticosteroids,
- mineralocorticoids,
- immunoglobulins,
- complementary therapies and
- antidepressants.

What does the future hold for the diagnosis and treatment of CFS?

There are early suggestions that there may be some laboratory tests that can better define CFS. This will allow, if appropriate studies demonstrate that these tests are both sensitive and specific, better definition of the condition and better assessment of the putative treatments. Some initial studies have suggested that methylphenidate is significantly better than placebo in relieving fatigue and concentration disturbances in a minority of CFS patients. These were short-term studies lasting only four week and thus, further work is needed to investigate the long-term effects of this treatment. Dx

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Take-home message

- Chronic fatigue is common
- CFS is not the only cause of chronic fatigue (know the alternative causes)
- Exercise therapy and cognitive behaviour therapy are effective treatments
- Try to avoid the many unproven and expensive therapies available

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