

# FIBROMYALGIA AND CHRONIC FATIGUE

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My previous radio program and my present webcast program are both entitled “It’s all in your head!” How I came up with this title was listening to the discouraged patients that I routinely treated, and still treat, who have been told, by the doctors they have consulted, that the pain, discomfort, distress, debilitating fatigue, sleep disturbance and depression that they endure is “all in your head.” What this remark is meant to imply, of course, is that there is no physical cause of the condition and that the symptoms are manifestations of psychological factors. My response to these patients is that “of course it is in your head, where else would it be?” My remark however is not disparaging but rather indicates the actual location of many of the patients symptoms. The brain controls everything so all symptoms are associated with brain activity. The remarkable effectiveness of neurotherapy for the treatment of the symptoms associated with fibromyalgia and chronic fatigue is due to the fact that the brain functioning associated with the symptoms is treated. Although this derogatory sentiment about fibromyalgia patients was widespread among health care providers in the past, it is remarkable to me that it still persists with many doctors to this day. A few days ago I was surfing the internet health news feeds and was dismayed to find an item entitled “Fibromyalgia: A mental illness?” In this item was a quote from a Canadian neurologist stating that fibromyalgia was a term waiting for a definition.

In a sense I agree with the notion that the label is unhelpful, a sentiment I hold for most diagnoses. For example, to be diagnosed with ADHD, hyperactive type, the child must be rated as having six or more of nine symptoms for at least six months. What if the child has five of the nine symptoms or, on the other hand, all nine for two months? For fibromyalgia, the patient must have eleven or more of eighteen specific points respond to palpation with significant pain. What if the patient only responds to eight of the body locations? The health care industry has a huge component dedicated to putting names on things. Unfortunately, this expensive activity often does not result in any useful information to guide thoughtful clinicians in developing treatment strategies.

There are some common features found in virtually every client who seeks treatment for the symptoms indicated in Table 1. Whether or not the client carries the label “fibromyalgia” and/or “chronic fatigue syndrome” is largely irrelevant. The clients universally report sleep quality problems. As noted in the first figure, 85% report sleep disturbance, 60% report frequent waking, and 60% report non-restorative sleep. Neurologically, we find that these patients universally show a deficiency in the balance of slow to fast brainwave amplitude in the back of the brain. This ratio, called the Theta/Beta ratio, is associated with mental quiet, sleep quality, mental chatter, stress tolerance, stamina, and self-medicating behaviour. Obviously, the first therapeutic step is to enhance sleep quality. The way we definitely do not want to try to improve sleep is to sedate. These medications may increase sleep time but they have a very poor record for increasing quality of sleep and further they usually exacerbate the symptoms. Clients report fatigue, mental “fog” and habituation – that is, they need increasing levels of medication.

**Table 1. FIBROMYALGIA SYMPTOMS**

<p>Widespread and Shifting Soft Tissue Pain</p> <p>Sleep Disturbance (85%)</p> <p>Frequent Waking (60%)</p> <p>Non-Restorative Sleep (60%)</p> <p>Comorbid Conditions Including Headache, IBS, TMJ, Depression, Anxiety</p> <p>Cognitive Inefficiencies Including “Fibrofog”, Deficient Memory, Poor Concentration</p>
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The second feature of this complex of symptoms is that clients almost always report cognitive problems (the so called “Fibrofog”), pain or physical discomfort at several locations on the body, fatigue, and emotional funk that varies from suicidal depression to simple discouragement. Each of these features (symptoms) is associated with an identifiable brainwave pattern. Hence, the first step is ALWAYS to do a simple electroencephalographic (EEG) assessment to identify the areas of inefficiencies in brain functioning. This initial EEG evaluation only requires about ten minutes but provides a wealth of information about symptoms. In fact, we often do not require any information from the patient to be able to correctly identify the symptoms.

**Table 2. EEG PATTERNS**

<p>Elevated Slow Frequency Amplitude in the Front of the Brain</p> <p>(often primarily on the right – same pattern as found with viral infection, allergies, and toxins)</p> <p>Excessive Fast Frequency and/or Deficient Slow Frequency Amplitude at the Back of the Brain</p> <p>Frontal Imbalances Associated with Elevated Activation on Right Side</p>
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Table 2 shows some of the common brainwave patterns found with clients with diagnosis of fibromyalgia or chronic fatigue syndrome. The first item, elevated slow frequency amplitude in the frontal regions of the brain, is associated with the cognitive problems that most of the clients report. Problems with attention, concentration, planning, organizing, sequencing, multi-tasking and following through on tasks are the common complaints. We often find this primarily on the right frontal area. This was identified some years ago by Dr. Stuart Donaldson and Dr. Barbara Westmoreland as being associated with fibromyalgia and viral infections such as measles. Elevated slow frequency in the frontal regions is found in many other conditions where clients report cognitive problems. In addition to other causes of this slowing, obviously sleep quality problems also affect intellectual functioning. So again, this speaks to the efficacy of starting treatment focused on improving sleep quality.

After the deficiencies in the back of the brain are improved then we reassess the frontal regions. Generally with improved sleep there will be some improvement in the frontal areas. Treatment at this point would focus on reducing any remaining slow frequency excess (to improve cognitive functioning) and secondly balancing the frontal cortical regions so the difference between the right and the left sides are less than 15% for all brainwave frequencies (to improve both cognitive functioning and mood state).

**Table 3. GENETICS OF FIBROMYALGIA**

*(from: Buskila, D. and Neumann, I.: Curr Pain Headache Rep. 2005, 9, 13-15)*

	<u>% with FM</u>
Male with Blood Relative with FM	14
Female with Blood Relative with FM	44

There does seem to be a genetic component to this disorder and it primarily affects females. Reports indicate the distribution of clients presenting with fibromyalgia is about 80% female. As indicated in Table 3, the heritable link also appears to be in that range as well. It is also important to be mindful that these conditions are very serious. I often hear health care providers speak unsympathetically about these clients. The implication of the negative comments is that these clients are complainers with psychological rather than physical problems. In fact, it is both – these patients have significant psychological and physical issues as shown in TABLE 4. Thus, like depression and some other psychological conditions, fibromyalgia can have life-threatening implications. As noted in Table 4, clients with fibromyalgia have significantly elevated mortality ratios in a number of different comorbidity categories.

**Table 4. MORTALITY RATIOS WITH FIBROMYALGIA PATIENTS**

*(from Dreyer, L. 2010, ArthritisRheum. 62, 3101-3108)*

<u>FEMALE PATIENTS</u>	<u>MORT RATIO</u>
Suicide	10.5
Liver Cirrhosis/Biliary Tract Disease	6.4
Cerebrovascular Disease	3.1

It is also interesting to note that although our common notion that the typical fibromyalgia patient is a middle aged female, there is a growing recognition of children with these conditions. As shown in TABLE 5, many of the symptoms of paediatric fibromyalgia are common with conditions such as ADHD, depression and anxiety. Of particular note is that 96% of these patients report sleep disturbance again pointing out the merit of focusing the initial treatment on improving sleep.

**Table 5. PAEDIATRIC FIBROMYALGIA SYNDROME**

*(from Siegel et al, 1998, Pediatrics 101, 77-82)*

Diffuse Pain (93%)
Headaches (71%)
Fatigue (62%)
Depression (43%)
IBS (38%)
Dysmenorrhea (36%)
Anxiety (22%)
Sleep Disturbance (96%)

Neurotherapy focuses on the neurological conditions associated with the symptoms. Thus, the causes of the problems are corrected. This is in contrast to trying to pharmaceutically calm or sedate the arousal symptoms such as pain or poor sleep and/or stimulating the hypoarousal conditions such as mental sluggishness. There are conditions in which clients respond effectively to pharmaceutical treatment of their condition. Many clients with fibromyalgia and/or chronic fatigue, however, find themselves in distraught states of heavy medication but with severe symptoms and often with harsh side effects from the drugs they are taking. For such clients, neurotherapy has been shown to be remarkably effective.