CHRONIC FATIGUE

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WHAT IS CHRONIC FATIGUE? Chronic fatigue is persistent or relapsing fatigue that lasts for over six months.

SYMPTOMS: Chronic fatigue symptoms include feeling tired, lack of energy, weakness, and exhaustion. Decreased short term memory, loss of concentration, sleep disturbance, musculoskeletal pain, and depression are also common symptoms seen in chronic fatigue patients.

CAUSES: Causes of chronic fatigue are too numerous to count and many people have several causes contributing to their fatigue. Depression, idiopathic (which means we do not know the underlying cause), and impaired sleep are the most common causes of chronic fatigue. Sleep disorders such as sleep apnea, restless legs syndrome, shift work sleep disorder and narcolepsy are also common. A sister diagnosis of chronic fatigue is fibromyalgia. Hormone imbalances are common in women of child bearing age as well as during menopause. Low testosterone is fairly common in men over age 50 and in people who take narcotics. Medical problems such as diabetes, obesity, congestive heart failure, anemia, thyroid, liver and kidney disease, infections, and cancer can cause chronic fatigue. Rheumatologic and neurologic disorders are associated with chronic fatigue. Most studies indicate that chronic fatigue is caused by psychologic problems such as anxiety and depression approximately 50% of the time and the remaining 50% is caused by physical and unknown factors.

HISTORY AND PHYSICAL: After obtaining a full medical history, your physician may ask several other questions to determine a cause. Psychologic problems such as anxiety and depression are strongly associated with chronic fatigue. We often cannot tell if the depression caused the fatigue of the fatigue caused the depression. Sleep patterns are extremely important. Most people need seven to eight hours of sleep per night. Additionally, it is important to know if you feel well rested when you first awaken in the morning. Do you exercise regularly for 30 to 60 minutes several days per week? Do you keep your stress levels down? Do you eat a good, healthy diet? Your physician may ask if you have other associated symptoms that may indicate a more serious problem such as fever pain, nausea, vomiting, weight loss, shortness of breath, weakness, and swollen legs. A complete physical examination should be performed to assess for underlying medical problems that could be causing chronic fatigue. Obesity as well as a 17” neck circumference in men and a 16” neck circumference in women is strongly associated with sleep apnea. Waist circumference over 35” in women and 40” in men is strongly associated with insulin resistance/prediabetes that are associated with chronic fatigue.

PROGNOSIS: The prognosis for chronic fatigue is dependent upon whether there is a good treatment for the underlying cause. For people with hormone deficiencies and insulin resistance, treating the underlying problem can be very effective in treating fatigue. Most people with chronic fatigue syndrome have multiple underlying causes contributing to their chronic fatigue. Most people with chronic fatigue do improve with appropriate treatment but it is not uncommon for a person to have fatigue indefinitely if there is no cure for the underlying cause.

LABORATORY EVALUATION: Extensive laboratory blood work is available to assess the person with chronic fatigue. Laboratory blood work includes a complete blood count, kidney function, liver function, arthritis profile, thyroid studies, hormone levels, and vitamin and mineral levels. For men, a comprehensive hormone panel may consist of thyroid studies (T3, T4, TSH), testosterone (free and total), DHEA-S, fasting insulin and blood sugar, vitamin D3, B12 and PSA levels. For women, a comprehensive hormone panel may consist of FSH, LH, DHEA-S, progesterone, testosterone (free and total), prolactin, fasting insulin and blood sugar, thyroid studies (T3, T4, TSH), vitamin B12 and D3 levels, and if in menopause, estrogen levels. Chest x-ray, electrocardiogram, and x-rays studies may also be performed.

PREVENTION: Obviously, the best treatment for chronic fatigue is to treat the underlying disorder. Techniques to help prevent chronic fatigue include appropriately managing stress, exercising 30-60 minutes several days per week, easting a good healthy diet, discontinuation of smoking, limiting alcohol intake, taking no caffeine products after 6 p.m. and getting eight hours of sleep per night.

BEHAVIORAL TREATMENT: Behavioral techniques to improve sleep should be the main stay of treatment. Allowing eight hours of sleep per night, going to bed and getting up at the same time each day, minimizing light in the bedroom, keeping the room under 70° or less, discontinuation of caffeine and alcohol in the evening, avoidance of nicotine, regular exercise during the day, and getting bright sunlight during the day will all improve sleep hygiene.

NATURAL PRODUCTS: There are multiple natural vitamins, minerals, and herbs that have been found to be quite helpful in treating chronic fatigue. Ginseng one capsule twice a day, coenzyme Q10 100 mg three times a day, NADH 5 mg twice a day, magnesium 500 mg a day, DHEA-S 25 to 50 mg per day, folic acid 1 mg per day, and vitamin D3 5000 international units a day may all improve energy. For people who are malnourished, whey protein two scoops a day will help improve strength and endurance. Vitamin replacement therapy, particularly the B vitamins, may be helpful. Iron may be prescribed for patients who are anemic, pregnant or have excess bleeding.

PHARMACOLOGIC TREATMENT: Provigil 200 mg and Nuvigil 150 to 250 mg are very helpful with limited side effects for treating chronic fatigue. Amantadine 100 mg twice a day may be helpful. Ritalin 10 mg twice a day is rarely used because of abuse potential, but it can be very helpful for fatigue due to a central nervous system disorder. Anti depressants occasionally improve chronic fatigue. Savella in fibromyalgia patients has been found to be helpful in improving fatigue. Cortef 5-10 mg twice daily for those with low cortisol levels can improve fatigue. If I had to pick one medication to treat chronic fatigue, it would be **Provigil** 200 mg in the morning. It decreases fatigue, improves concentration, has virtually no side effects and works immediately.

BIOIDENTICAL HORMONE REPLACEMENT THERAPY: For men with hormone deficiencies, testosterone, DHEA, melatonin and NP thyroid can be very helpful. For women, low dose testosterone, progesterone, DHEA, melatonin, NP thyroid can be helpful. For menopausal women, replacing estrogen can also be beneficial. If I had to pick one hormone to treat chronic fatigue, it would be **NP Thyroid** (which contains both T4 and T3) slowly titrated until the patient's T3 lab value is high normal (about 4). Unfortunately, this is rarely done by most physicians, who typically prescribe low dose Synthroid (which contains T4 only) that rarely increases the T3 high enough to reduce fatigue. It can take 3-6 months to see improvement.