Chronic Fatigue Syndrome

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You are an endurance-trained athlete who has worked for months or years to develop stamina, skill, strength, and distance abilities. Your plan has included speed sessions and cross-training. If you are so fit, why do you feel so lousy? The symptoms can be multiple and often start out with a "dragging yourself out of bed" feeling and may progress to the extreme - exhaustion climbing a flight of stairs. When your health professional suggests the possibility of Epstein-Barr virus syndrome or chronic fatigue syndrome, you may look querulously at the consultant and say, "What? Not me, I'm too fit." So who gets these problems? What do you do about it? How do you avoid it? In addition, when you recover, assuming you recover, what do you do to prevent this from happening again?

Chronic fatigue syndrome is not new and the medical literature has described group occurrences for decades. To the individual, an outbreak of fatigue in an athletic training group may mean little. Fatigue is a common outcome of long training sessions, a marathon or triathlon but recovery is usually rapid. A day or so goes by and the individual has overcome soreness, poor appetite, transient insomnia, etc. However, what happens when the fatigue is ongoing and even progressive. Fatigue is a common cause of visits to a doctor and the complaint of "I'm tired all the time and I have no energy" is nothing new, but, in an athlete, who is often "full of energy" and in a tireless pursuit of a personal best or new level of fitness, such a complaint is usually answered by "If I did what you do, I would be wiped out as well." Symptoms of tiredness, listlessness, lassitude, lack of enthusiasm, difficulty "getting it going" may herald a significant medical problem that needs attention. Physiologic fatigue is the inability of a muscle group to sustain an expected exercise; multiple muscle fatigue associated with mental lassitude should spark concern in a rehabilitating, aspiring, or professional athlete of possible chronic fatigue syndrome (CFS). Other symptoms include weakness, blackouts, insomnia, disorientation, short-term and long-term memory loss, sore throat, lymph adenopathy (enlarged lymph glands, at times sore or painful), and feverishness alternating with "cold feelings."

In January 1985, <u>Annals of Internal Medicine</u>, Peterson and Cheney, found in at risk individuals, Epstein-Barr antibody titers were abnormally high and suggested that CFS was related to an epidemic. The Center for Disease Control in Atlanta, Georgia, funded an investigation, which demonstrated no clear link between Epstein-Barr virus and CFS and suggested that medical professionals look for treatable conditions including anxiety, depression and hormonal dysfunction. CFS, once called epidemic neuromyesthenia (1934), may start spontaneously in the non-athletic population as an upper respiratory or viral-like illness progressing to a state of neuromotor depression often with psychosocial roots and, if enough individuals in one cohort have the symptoms, hysteria may play a part. Depression-prone individuals also appear at risk as they already have delayed ability to recover or convalesce from other illnesses. As E. Eichner, M.D., described in 1989, "Today's literature on chronic fatigue strengthens the mind-body connection."

The hallmark of the athlete considered for chronic fatigue syndrome is that physically they are usually "fine" and usually pass a physical examination. On examination, they may be a little thin and perhaps have some confirmed weight loss. Muscular development may diminish and this may be related to poor appetite and secondary depression. The athlete may have had a few goal-related setbacks and complain of depressed mood, persistent fatigue, difficulty concentrating, and loss of libido. A laboratory search for etiology usually includes hormonal screens particularly for reductions in cortisol and thyroid related hormones. Additional symptoms including headaches, muscle aches, feverishness, and sore joints may lead to systemic analysis for rheumatoid arthritis or other arthritides. As the test results arrive, the unproductive nature of the results, cause the athlete to lose faith in the practitioner as not being able to "figure me out."

However, this lack of a definitive diagnosis may lead to the diagnosis of CFS, which can occur in one, or several members of a team suggesting a contagion but also suggesting that similar lifestyle and stresses, particularly over-training, can precipitate the syndrome. The symptoms - insomnia, tiredness and inability to concentrate and focus on athletic achievement - may cause a dizzying downward performance spiral further reinforcing the secondary depression.

What to Do?

It appears that the most common precipitant, in otherwise healthy athletes of chronic fatigue syndrome, is over-training - putting the body through a series of stresses or escalating stresses that are beyond the body's ability to recover or "catch up." How much of this is mental and how much physical is debatable, but the end result is the same - poor performance and the bevy of other physical symptoms.

So, what does the individual do? Get checked out - the symptoms of progressive fatigue, fever, weight loss, insomnia, headache, myalgias, arthralgias may be caused by a physical disease entity. Anemia, arthritis and Epstein-Barr virus may be some of the causes. Since chronic CFS has been studied over the last 10 years, the pattern of incomplete recovery, poor nutrition, and repeated over-exertion need to be identified <u>and</u> corrected. Poor nutrition is often linked to the athlete's desire to get thinner, often avoiding good diet and replenishment of vital minerals, vitamins and nutrients: in particular, carbohydrates. Weight loss can be the final significant stressor in an individual already marginally over-trained. Individuals with high titers and/or progressively increasing titers of Epstein-Barr virus may have to quit putting themselves through additional exercise stress to avoid cardiomyopathy or hepatic disturbance. On an electrophysiologic muscle level, the muscle motor unit may work fine but central nervous system control appears to be impaired through mechanisms poorly understood.

So, should the athlete quit exercise? Probably not, but the exercise needs to be at a low level and carefully monitored to avoid tachycardia (fast heart) and breathlessness in order to break the cycle of fatigue and possibly becoming unfit. Scrupulous attention to diet may be helpful as well. Prognosis appears favorable, but the course of recovery may be frustrating.