Fatigue Management: An Interdisciplinary Approach

Fatigue is something we have all felt and is a normal consequence of physical or mental exertion and emotional stress. Typically, energy is restored with rest and sleep. However, multiple sclerosis is uniquely associated with fatigue that can interfere with all aspects of life. This type of fatigue is not as easily resolved as "normal" fatigue and is the most common symptom/complaint of MS, with 75-95% of people with MS experiencing fatigue. "MS fatigue" occurs daily, worsens as the day progresses and worsens with heat. It often interferes with physical activity and therefore results in changes in strength, mobility and function. The definition offered by the development panel for the fatigue guidelines established by the MS Council for Clinical Practice Guidelines is "a subjective lack of physical and/or mental energy that is perceived by the individual or caregiver to interfere with usual and desired activities". The biologic basis of MS fatigue is uncertain but is generally experienced as a constant underlying lassitude.

It is important to be aware of your fatigue and learn what factors may increase your fatigue. Fatigue can be affected by factors unrelated to your MS, such as depression, sleep deprivation, deconditioning, dietary factors and medications. Because of the complex nature of fatigue, more than one treatment in managing fatigue is best.

The first step is identifying fatigue as a problem. As stated earlier, many people experience fatigue but it must be determined if the fatigue is limiting function or interfering with quality of life as well as determining whether the fatigue is acute or chronic. The MS Council for Clinical Practice Guidelines for Fatigue recommend "determining if fatigue has been present on more than 50% of the days for more than 6 weeks or if there has been a significant development or increase in fatigue in the past 6 weeks, and if fatigue is reported to limit functional activities or interfere with quality of life". A thorough evaluation is required to determine the potential causes and severity of fatigue as well as its effects on function. This may include questionnaires and surveys to determine current patterns of fatigue and self-management strategies. If it is determined that fatigue is consistent with non-MS causes such as those stated above, then further testing may be required. For example, if a preliminary evaluation reveals that fatigue is recent in onset concurrent with sleep disturbances, further testing may be required to determine the etiology of the sleep disturbance prior to treatment. Ultimately, treatment directed at the cause of the non-MS fatigue is recommended. Follow-up assessment is important to determine the effectiveness of the recommended treatment strategy.

If it is determined that MS fatigue is the primary reason for fatigue, an interdisciplinary approach (an approach utilizing more than one healthcare professional in a coordinated fashion) is crucial to determining a proper treatment plan. Health care professionals often involved in the assessment and

management of fatigue are: Physician, Nurse, Physical Therapist, Occupational Therapist and Psychotherapist.

Initial management of MS fatigue usually includes education and counseling in areas of lifestyle modifications as well as medications. The lifestyle modifications may include adjusting activity levels, time management strategies, adjusting diet and starting a prudent exercise program. Medications used for the treatment of fatigue in MS are Amantadine, Pemoline and Modafinil.

If the initial management of MS fatigue is ineffective referral to allied health professionals is indicated. Physical and occupational therapists with expertise in exercise and energy conservation strategies will assess the individual and make recommendations to manage fatigue. Assessments will include evaluation of current activities, level of fitness, available equipment and environmental factors.

An activity diary is recommended in order to analyze current activities. This analysis can help the therapist and patient understand what may be making the fatigue worse and what helps in managing the fatigue. The patient and therapist work together to set realistic goals and priorities which help conserve energy.

Petajan1, et.al., (1996) studied the effects of a 15 week aerobic exercise program on people with MS. Results of the studies showed significant increases in VO2 max, a measure of aerobic capacity. This improvement was found to be independent of neurological impairment. This finding is important for the improvement of overall health, quality of life and a greater capacity to perform activity. The Heuga Center conducts fitness evaluations on individuals using upper and lower extremity ergometry. The fitness evaluation is a graded exercise evaluation to determine the appropriate level of exercise for each participant, while avoiding fatigue during exercise. Utilizing a rate of perceived exertion (RPE) scale allows each person to individualize their exercise intensity. The RPE scale is a 0-10 scale in which 0 indicates “nothing” and 10 indicates “maximal” exertion. Finding an appropriate level of exercise intensity will help decrease fatigue during and following the exercise session.

Adaptive equipment and modifying work and home environments can be beneficial as a fatigue management strategies. These energy conservation techniques may include use of mobility or self-care equipment to decrease effort with movement, improve body position with activities and provide effective compensation for activities of daily living. Physical and occupational therapists with expertise in adaptive equipment and energy conservation techniques are good resources for these fatigue management strategies.

It has been established that fatigue is a very common symptom of MS and often difficult to manage. Medications alone are not enough. An interdisciplinary approach that includes a careful history to differentiate primary MS fatigue from

secondary causes, education in fatigue management strategies and a guided program of regular physical activity is most successful.

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REFERENCE:

1. Petajan J. Gappmaier E, White AT, et al. Ann Neurol. 1996;39:432-441.