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FATIGUE: THE ART OF THOROUGH ASSESSMENT IN CHRONIC PAIN SYNDROME

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Toss and turn. Up and down. Bathroom. Cigarette. Watch a little television. Another info-mercial. Sleepy in the recliner. Back to bed. Can't get comfortable. Can't lay on that hip. Can't lay on my back. Got to get up for work in 4 hours. So much to do tomorrow. Try laying on the couch. Leg going numb. Bathroom. Cigarette. No time tomorrow for a nap. Too late to take a pill. Try the heating pad. Two hours until work. Bathroom. Try the bed again. Already time to get up. Cigarette. God, I'm tired. I can't keep this up. I can't live this way...

Pain is one symptom of the condition of chronic pain. Constant pain inhibits normal functions and rhythms of the body, both psychological and physical. Constant pain prevents delta wave sleep which prevents the patient from restful sleep. The lack of rest precipitates the pain. Therefore, a cycle of pain and insomnia begins. This constant pain and frequent insomnia is a stressor leading to anxiety and depression. The pain, insomnia, depression, and anxiety all have associated fatigue. Few people have chronic severe pain without associated fatigue. Pain itself is fatiguing. Limping takes more energy than walking with a steady, balanced gait. The incorrect posture of limping exacerbates pain which exacerbates fatigue. To treat the fatigue, you have to trace back to all causes. If the fatigue is not resolved, the pain cannot be resolved. Therefore, to treat pain, the first focus must be on fatigue.

Fatigue affects normal daily functioning. Fatigue and pain may not shorten life, but they make life less acceptable. Quality of life is more important than quantity of life. Function will not improve if fatigue is not treated. When a patient comes into the office for pain management, the patient is there because normal daily functions are hindered. So, the patient is really asking for help with function. The fatigue from the pain is the primary disability. Once the functioning decreases, anxiety and depression result, because the patient simply cannot live a "normal" life. Productivity, social interaction, and intellectual pleasures and stimulation all diminish. Pain can be masked with pain medication, but the resulting fatigue of pain cannot be masked. Therefore, to restore functioning, the fatigue aspect must be addressed before the pain can be managed. The goal of pain management is to reach optimal general functioning. And to this end, fatigue must be treated.

Fatigue is a symptom of an underlying cause, or more commonly, multiple causes. In the pain patient, fatigue compounds the pain. Fatigue is a common, but vague complaint that is often overlooked and difficult to treat. It is not a disease or a diagnosis alone. The cause must be found to treat the symptom. Remedies now sold on the market commonly lure patients to buy because they claim a single medication, vitamin, or herb will treat fatigue and boost energy. Fatigue will not resolve if only the symptom is treated. If the underlying cause is ignored, a serious medical illness could be overlooked. Fatigue is defined as "a state of increased discomfort and decreased efficiency resulting from prolonged exertion; a generalized feeling of tiredness or exhaustion" [(1)]. It is also described as a "normal reaction to intense physical exertion, emotional strain, or lack of rest" [(1)]. Twenty to forty percent of fatigue cases result from a physiological condition [(2)]; and fatigue is the seventh most common physical complaint from patients [(2)]. Due to the multiple possible causes of fatigue, a thorough physical assessment combined with a detailed patient objective history is necessary. If the physician takes the time to assess the patient completely, the causes come forward and can be treated; then patient function can increase. Figure 1 illustrates a complete flow-sheet that addresses all of the causes of fatigue.

Causes can be categorized on the basis of origin physiological and psychological. The physiological causes can be further

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subdivided into chronic fatigue syndrome, chronic pain, blood abnormalities, altered oxygenation and sleep deprivation. Psychological causes are divided into depression and anxiety.

CHRONIC FATIGUE SYNDROME VS CHRONIC FATIGUE

The majority of fatigue patients are experiencing chronic fatigue and only a minute number actually meet the criteria for chronic fatigue syndrome (CFS). CFS is a condition which is defined as "a combination of symptoms commonly occurring together that present a distinct clinical picture. Extended, unexplained exhaustion is a major symptom, but is not the only symptom" [3]. Eliminating all other causes of fatigue does not yield a diagnosis of CFS. Often, physicians will tell a patient that he/she has CFS when no other cause has been found. This relieves the physicians of the burden of treating the patient's complaint.

To be diagnosed with CFS, certain criteria must be met. Figure 2 lists these criteria [3,4]. It is important to distinguish between a chronically fatiguing state and chronic fatigue syndrome. The treatment is different for each. In CFS, the symptoms are controlled, while with a chronically fatiguing state, the treatment is finding the cause and treating it. The cause of a chronically fatiguing state may be found and resolved. The cause of CFS is uncertain and there is no cure; only the symptoms can be treated. To have CFS, a patient must have at least six months of fatigue, but the condition is not necessarily life-long. Ten to fifteen percent of severe cases resolve in eighteen months. A small number are impaired five years later. Treatment involves restoring the most possible functioning. Bed-rest or limited activity is not recommended. This leads to muscle atrophy. Exercise should be slowly instituted [3]

Major Criteria:

Fatigue six months duration at least

Minor Criteria:

At least four or more of the following:

- Problems with memory or concentration
- Sore throat
- Tender lymph nodes in an armpit or the neck
- Muscle pain
- Joint pain
- Unusual headaches
- Waking up tired
- Exhaustion after physical activity

Figure 2: Criteria for diagnosis of chronic fatigure syndrome

CHRONIC PAIN

Pain is considered chronic after six months. Once a patient has experienced pain for this length of time, changes occur in the body's interpretation of pain. There is no longer an acute, fight-or-flight response. The blood pressure, respiration, and pulse stabilize within normal limits. The body then finds other ways to respond to the pain. This is the chronic pain syndrome. Pain is only one factor. On each spoke of the "Pain Wheel" (Figure 3) is a factor resulting from chronic pain. Function is in the center or hub, holding the wheel together. The spokes are *pain, insomnia, fatigue, depression,* and *anxiety*. Each spoke affects every other spoke and, furthermore, function itself. Every factor has to be addressed to treat any one and to improve functioning.

When a patient comes for help with pain, treating only the pain is like pulling at one end of a tangled ball of twine. When one strand is pulled, the middle knots up. It is necessary to unwind the whole ball of twine. All factors resulting from chronic pain must be treated to treat the pain. Holistic care is necessary. The whole body must be treated, not just each ailment. A pain control plan must be comprehensive, and care must be coordinated. One person may be seeing a psychologist, chiropractor, and anesthesiologist, but none of them address the same issue or plan. Each clinician is pulling on different pieces of the twine. Disciplines cannot just be stacked, they must be coordinated. Many pain programs emphasize one modality of treatment, such as narcotics, injections, or manipulation. These programs fail to restore optimal function. The vision for the future of pain management is to treat the entire chronic pain syndrome, which treats the entire person.

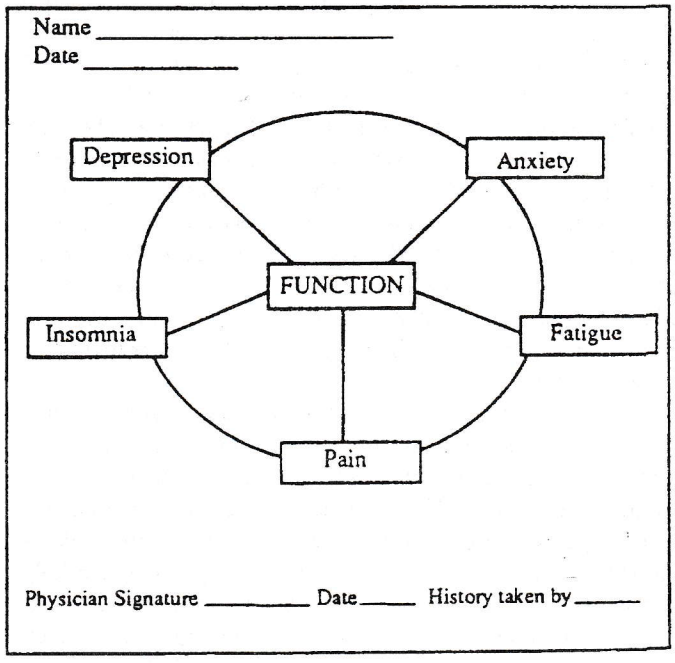

Figure 3. Oliver Pain Wheel.

Assessment of pain is difficult. The pain scale is, at times, of little help in evaluating pain. Most patients have trouble articulatin

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pain as a number 0 to 10; patients often want to say pain is more than a 10 to emphasize pain severity. A patient may show pain decrease but continue to have a poor functional status. A person may also continue to have a high pain scale rating, but due to improvement in the other factors on the Pain Wheel, have improved functioning. The numbers do not matter, because the goal is function. The analog scale is also confusing and does not show slight improvements, as it is difficult to objectify a subjective symptom. Assessing functional status objectifies pain and is the ultimate assessment and goal basis. The clinician must assess the patient's ability to perform daily activities, interact with family, and friends and have a job. The patient should be asked, "What can you do now that you could not do before?" In this manner, functioning can be assessed in terms of improvement or decline.

There are three areas to evaluate to determine the success of pain management. First, the initial pain is documented thoroughly. Second, the assessment of functioning is repeated on every visit. Finally, the over-all success-rate of the pain management program is assessed.

Treatment of pain must be on a long-term basis. Repeated refills of short-acting narcotics may lead to addiction and tolerance. Pain must be relieved 24 hours each day to restore functioning. It is necessary to treat pain in the night as vigorously as that occurring during the day. Night-time relief allows for delta wave and REM sleep for physical and mental rest to prepare for the next day. Day-time relief allows for activity. Muscle activity during the day leads to rest at night. This diurnal variation is necessary. The cycle must be complete for productive functioning. Muscle atrophy due to activity restriction secondary to pain leads to decreased metabolism, and, consequently fatigue.

Treatment modalities that allow for control of the fatigue/pain process thirty days of the month should be considered. Pain should be absent as close to 100% of the time as possible. The best option for pain relief is long acting narcotics and treatment of the other factors in the Pain Wheel. MSContin® or Oxycontin® work for 12 hours and are taken twice a day. These medications allow for control of pain throughout the night. When a patient is given four-hour pain relievers at night, the medication wears off at four hours and the sleep cycle is interrupted. The Fentanyl® patch lasts three days and allows the patient to sleep through the night and to awaken with pain relief already present. Adjuvant analgesics work by controlling pain and lowering the dose needed with a narcotic. Adjuvant medications with some analgesic properties include antidepressants, anticonvulsants, skeletal muscle relaxants, and topical agents such as lidocaine and capsacian [10].

Breakthrough modalities are also necessary. This can be any combination of short-acting narcotics, physical therapy, chiropractic manipulation, electrical stimulation, trigger-point injections, or intravenous muscle relaxers. Relief of pain from these may last from one day to a week. If breakthrough pain occurs more than a few times a month, then the pain control plan needs to be readdressed. It is necessary for the patient to be involved in this plan and to understand the necessity of avoiding short-acting narcotics and anxiolytics.

The Pain Wheel is in perpetual motion, and each spoke affects all other spokes. Other medical processes (externals) may accelerate the wheel. Other medical conditions that cause fatigue can affect a spoke, which in turn affects all other spokes. Fatigue is the common denominator. For example, emphysema decreases the oxygenation of cells and leads to fatigue. This fatigue causes depression and anxiety, due to the loss of function. The decreased oxygenation causes insomnia. All of these problems lead to pain, which then exacerbates depression, anxiety, insomnia, and fatigue. It becomes a spinning wheel with an originating cause outside the wheel. Therefore, externals must be treated as well as the pain.

A pain specialist cannot give a narcotic without addressing fatigue and its multiple causes. Function will not improve in a patient who is treated only for pain, if insomnia or anemia, for example, are not treated. All psychological and physical causes of fatigue must be addressed to treat the pain. The whole person must be treated to reach optimal functioning.

BLOOD ABNORMALITIES

Anemia. Anemia is often the first problem suspected with a complaint of fatigue. Although it is often a culprit in fatigue, it is not usually the sole cause. Lab testing for abnormal values on a complete blood count (CBC), iron level, B12 level, and a hemoccult for blood loss are simple tests to perform. The key is in the follow-up testing to see if treatment has affected the deficiencies. Often a patient is placed on iron supplements or B12 injections and not followed for compliance or improvement in lab values. Months later, he or she presents again with fatigue, and the anemia is bypassed because it is presumed that it has already been treated. Actually, it was not thoroughly treated. For female patients, subjective history of menstruation and objective pelvic examination is necessary yearly and with complaints of fatigue.

Once anemia is diagnosed, iron deficiency anemia is treated with iron replacement for four weeks, and then the blood picture is reassessed for improvement. Iron dosage should be titrated monthly until sufficient levels are reached. Pernicious anemia is treated with B12 injections weekly for four weeks, and then a B12 blood level is redraw to determine improvement [5]. Once a stable blood level has been reached, monthly injections are usually sufficient; however, injections may be needed lifelong [2,3]. Patient instruction regarding diet changes and correct administration of the medications is essential. It is also necessary to ask the patient if the supplements for anemia have improved how he/she feels. This will clue the physician to look for other causes of fatigue, if no improvement has occurred.

MALNUTRITION

Malnutrition is defined as "poor nourishment resulting from improper diet or from some defect in metabolism that prevents the body from using its food properly" [1]. Although malnutrition is common, it requires timely history taking and instruction to correct. A food diary must be taken, even if this simply involves asking patients what they normally eat for breakfast, lunch, dinner and snacks. This will usually key the practitioner to the lifestyle

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the person lives. Patients with fatigue could have a poor diet leading to hypoglycemia. Therefore, a fasting blood sugar should be performed.

Weight is important for obesity assessment, but it may not be helpful in assessing nutrition. Any person can become malnourished if the diet is neglected [1]. A malnourished person is not necessarily emaciated or anorexic. A person can be protein deficient with muscle wasting but still be obese. It is easy to assume that a person is eating a lot, when they are very large. Once a person puts on pounds of fat and has lost muscle mass, their metabolism drops. Muscle is what regulates metabolism and energy levels. For example, a 300-pound person can sustain the weight with 1500 calories a day. Simply consuming less that 1500 calories leads to weight loss but not an increase in metabolism. Increased protein consumption resulting in increased muscle increases energy and decreases fatigue, malaise, and activity intolerance.

On the other side of malnutrition, a person may not be overweight while still requiring dietary instruction. A person with the ideal weight may be deficient in protein consumption. Weight loss is not the goal in this type of person -muscle gain is.

Treatment of malnutrition starts with patient instruction regarding the effects diet can have on the way a person feels and functions. Emphasis should be placed on a high protein diet of 50-100 grams per day of lean protein. The recommended daily allowance of protein is 50 grams. Patients should be encouraged to keep a log of protein consumption. Patients usually do not realize how little they are eating. A gradual increase in protein is recommended for tolerance. Protein supplementation is necessary for many patients who simply cannot or do not desire to consume that much protein in their diet. Supplementation can be achieved with powders, drinks, or protein loaded snacks. A high protein diet is only discouraged in patients in renal failure. Otherwise, protein consumption does not harm the liver or kidneys.

HYPOTHYROIDISM

A blood level of T3, T4, or TSH can be used to determine hypothyroidism, but the simplest lab evaluation is the free T3 level. Just a random normal TSH does not indicate clinical euthyroid. Clinical symptoms are a more important determinant of euthyroid than are blood levels. Even an increase in T3 from low-normal to the upper-level of normal improves fatigue. Blood analysis must be repeated until supplementation brings blood levels to normal [5]. It is important to assess thyroid levels in fatigue because an abnormality can lead to insomnia, a widespread problem in fatigue.

Hypothyroidism is treated with thyroid replacement. There is dispute among physicians over the most accurate supplement. Levothyroxine (Sythroid®, Levoxyl®), a synthetic thyroid preparation, is assumed to convert T4 to T3. Cytomel® is only a T3 supplement. Anotheroption is Armour thyroid. It provides both T3 and T4 supplementation. It was originally thought that the synthetic T4 supplementation was a more precise delivery of medication. Current beliefs hold that the T4 and TSB may be normalized with the synthetic thyroids, but without a conversion to T3. Lab values need to be tested every month until the dosage is stabilized, and then monitored every three months.

HYPOGONADISM

A baseline serum testosterone is necessary for anyone that complains of fatigue, including women. The loss of testosterone levels occurs in the aging process. Once levels are low, they will remain low unless supplemented. Low levels of testosterone have been shown to cause bone loss, muscle wasting, decreased HDL, depression, hostility, increased risk of MI, and fatigue. The loss of testosterone production manifests in subtle signs and symptoms. Muscle wasting is progressive [6]. With increased muscle wasting, a drop in metabolism leads to fatigue due to loss of energy. Blood levels of testosterone are affected by the circadian rhythm and are found to be lowest in the evening and peak daily in the early morning. For accurate results, blood must be drawn before 10:00 AM, and three pooled tests give the most accurate results. For subnormal levels, testing needs to be repeated, especially if no signs or symptoms are present. Research has shown that testosterone replacement can accelerate prostate cancer [6]. Therefore, a baseline PST and cholesterol must also be drawn.

Patch, injection, cream, or gel can be used to administer testosterone. Injections of 75-150 mg are recommended every 7-10 days to maintain stable blood levels. Larger doses at longer intervals can be given, but this leads to larger peaks and troughs in serum levels. Longer intervals enhance patient compliance but lead to fluctuations. The patient will experience a surge of testosterone soon after the injection and a low level soon before the next injection [6].

The drug release from the transdermal patch more closely mimics the patient's circadian rhythm [6]. The patch is applied once daily. Testosterone cream or Androjel® is now available and is applied to the skin daily. The serum testosterone should be checked every two weeks until therapeutic levels are reached, then every 3 months. Therapeutic levels range between 300 and 1,200 ng/dL [6]. Two months of therapy is required before improvement in fatigue can be expected, and about six months to reach a stable state. Once a therapeutic level is reached, supplementation is necessary lifelong. If supplementation is stopped, levels will drop to pretreatment levels.

DIABETES

Diabetes is a common cause of fatigue. Often a patient will tire before any other symptoms arise. The fatigue experienced with diabetes worsens after a meal, especially if the meal was comprised of large amounts of carbohydrates or fats. A fasting glucose of 126 or greater is the AACE recommendation for diagnosis of diabetes. Draw a baseline hemoglobin A1c when diabetes is diagnosed, and then every three months [7]. Even if a person is diagnosed with diabetes or has already had diabetes, all other causes of fatigue must be considered. The fatigue complaint must not be dismissed as due to only the diabetes. Most patients with fatigue have multiple causes of the condition.

Referral to a diabetic educator is indicated to produce informed and individualized self-management. If a patient maintains glucose levels above normal, that person is at increased risk of diabetic complications, as well as continued fatigue. Tight diabetes

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r gement is essential to control diabetes-induced fatigue. The p nt will not feel better until blood sugar is controlled at the normal level of below 126.

OXYGENATION

Cardiovascular. Anyone with complaints of fatigue or who is 40 needs an EKG annually. Vital-signs should be assessed at every visit. Hypotension, heart disease with associated decreased ejection fraction, CHF, and atypical angina decrease the amount of oxygen to the body, and, therefore, the cells lack the energy to perform.

Treatment consists of controlling hypertension without causing hypotension, treating hypotension, and treating angina. Hypotension should be treated with salt tablets and steroids. Referral to a cardiologist and enrollment in cardiac rehabilitation is indicated for a patient with an abnormal EKG. Angina prevention and control is a goal for patients with existing heart disease.

Pulmonary disease. Anything that decreases the amount of oxygen in the blood being transported to the cells causes fatigue. Any type of problem with the lungs hinders the transport of oxygen to the blood. A pulmonary function test and chest x-ray is recommended yearly for anyone over the age of 40 or who smokes. Vital signs and pulse oximetry is also necessary. The patient should be questioned regarding his/her breathing history. For someone with a chronic breathing problem, a thorough history will help t practitioner determine if the breathing disease is under control, f it is a culprit in causing the fatigue.

Smoking is the most preventable problem with fatigue. The nicotine not only decreases oxygenation, but the stimulant effect also causes insomnia and extra work on the heart. It is important to express to patients that as long as they continue to smoke, the fatigue will continue.

To treat fatigue caused by pulmonary disease, the clinician should continue to discourage smoking, encourage compliance with pulmonary disease treatments, and control weight. The patient should be referred to a pulmonologist for control of chronic obstructive pulmonary disease and asthma.

PYCHOLOGICAL CAUSES

Psychological problems increase the work-load of the body physically and mentally. Sixty percent of patients with fatigue experience it secondary to psychological disease [2]. Often, a patient does not want to admit to a mental problem or does not understand that a mental problem affects the body as well as the mind. Fatigue and insomnia complaints can be a patient's signal of anxiety, depression, or both. With anxiety and depression becoming common problems in today's society, everyone should be ened. Questionnaires a patient can fill out during an office sit are now available

Anxiety. Anxiety increases the work-load of the body, including increased blood pressure, heart-rate, and respiration. Chronic excitation wears down the body's defense. Anxiety also prevents rson from falling into delta wave sleep leading to sleep deprivation. An anxiety questionnaire, such as "Mind Over Mood Anxiety Inventory" should be given to anyone complaining of fatigue [8]. This test should be repeated often to monitor for improvement or decline.

Treatment of anxiety should focus on controlling symptoms without causing sedation. Sedating medication, especially a sedating hypnotic and anxiolytics, should be avoided to decrease the likelihood of compounding the problem with fatigue. Anxiolytics, such as diazepam, cause obvious sedation. These drugs treat the symptom of anxiety but not the cause of it; they cause daytime fatigue. The use of short-acting anxiolytics in pain patients worsens the fatigue; therefore, they should be avoided in this population. The sedating medications also block delta wave sleep, compounding the problem of sleep deprivation. Referral to a counselor is important to uncover the cause of the anxiety. The clinician should make every effort to control depression, and should be mindful of the fact that anxiety can be a symptom of depression.

Depression. A depression scale is a good tool for assessing depression. Use of the "Zung" or "Mind Over Mood Depression Inventory" are suggested [9,8]. Repeat the assessment frequently to monitor for change. Antidepressants and counseling are key to treatment for depression. It is important to inform the patient and family members that treatment with antidepressants takes at least three weeks to show improvement. Controlling anxiety is also important in controlling depression.

SLEEP DEPRIVATION

One-hundred million Americans have occasional sleep problems. Thirty million have chronic insomnia [4]. Fatigue is a complex problem with multiple causes, but the majority of people with fatigue also have a sleep deprivation problem. Treatment of sleep deprivation depends on the condition provoking the problem.

Sleep apnea. Everyone with the complaint of fatigue must be assessed for sleep apnea. Treatment for insomnia cannot be initiated without first testing for and treating sleep apnea. Assessment begins with asking the patient if he/she snores and if a family member witnesses periods of apnea. The next step is oximetry at night and a sleep study.

Treatment for sleep apnea can be difficult, but it is still necessary. Physical problems can result from chronic sleep apnea, such as heart disease [4]. It is also important to tackle this problem to restore the patient's functioning. It is necessary to inform the patient and family members of the disease and treatment. A person with sleep apnea does not usually awaken during apnea episodes; therefore, they do not realize they have not slept throughout the night. Treatment can consist of surgery, bite splinting, weight-loss, and/or home use of a C-pap machine [4].

Insomnia. Assessment is the key to treatment in insomnia. The practitioner must find the cause of insomnia before trying to treat it. Manly physical diseases and certain medications can cause insomnia, but the majority of sleep problems are a consequence of behavioral problems and can be controlled

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with behavioral changes. The assessment should begin with a sleep questionnaire and a sleep journal.

Treatment should consist of medical interventions and education. Sedating hypnotics need to be avoided. New generation benzodiazepines, such as Ambien® and Sonata® , have been found not to interrupt the normal sleep structure, but they do not increase delta wave sleep. Depression anxiety, asthma, GERD, BPH, restless leg syndrome, hormone changes, immobility, and pain must be controlled because they prevent a person from going into delta wave sleep. Herbs such as melatonin and valerian root have limited sedating effects. Antihistamines alter the sleep structure by blocking delta wave sleep; therefore these agents must be avoided [4].

Educational sessions should focus on the goals of effective sleep, therefore, fatigue and functional improvement. The patient should be taught that a decline in the fatigue, not the total hours of sleep, is the goal. Sleep restriction, stimulus control, sleep hygiene, and relaxation techniques are important topics for instruction.

CONCLUSION

Fatigue is a symptom (not a disease in itself) felt by many patients, but often not resolved. The two principles of fatigue resolution are thorough assessment and follow-up. The art of assessment is the balance between thoroughness and timeliness. It is important to be able to completely investigate all aspects of the problem without becoming overwhelmed and unfocused. The rule of assessment is taking the symptom seriously and then taking the time to completely investigate the causes. A thorough assessment involves a complete physical and psychological examination. The clinician must look for multiple causes. Use of a fatigue flow-sheet and the Pain Wheel helps to streamline this process. Blood abnormalities are obvious physical causes, while sleep problems, pain, and malnutrition are not. The prudent clinician will not overlook psychological causes. However, more extensive communication is required to discover a psychological problem. Sixty percent of fatigue cases have a psychological logical component [2]. In addition to all of the causes, most patients will also have a degree of sleep deprivation. Sleep deprivation can have physical and psychological origins.

The other principle to treatment of fatigue is diligent follow-up. It must be remembered that there is no single medication to treat fatigue. Each cause must be treated individually and followed-up. Patients are usually more compliant if they understand that more than one visit may be required to resolve the problem of fatigue. Most important in treatment, is to do no further harm. Medications that trigger insomnia must be avoided, just as the clinician must avoid sedating hypnotics, anxiolytics, and chronic use of short-term narcotics. These block delta wave sleep causing sleep deprivation and can also lead to daytime sedation. The patient should be encouraged to participate in the care plan, because the behavioral changes are going to make the most improvement with insomnia. The goals of treatment and the principle that function is the ultimate goal must be underscored for the patient. Support diet and exercise changes for those malnourished in protein consumption, whether obese or thin, must be initiated. A sleep program for good sleep hygiene, and counseling for anxiety, depression, and insomnia must be planned and followed. The patient must understand the importance of compliance with medications and follow-up office visits for evaluation. For the pain management patient, the link between pain and fatigue and that treatment of both pain and fatigue is necessary to resolve either is perhaps the most important tenet of good care..

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