Fatigue

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KEYWORDS

• Fatigue • Obstructive sleep apnea • Depression • Ferritin

KEY POINTS

- Further defining a patient's complaint of "fatigue" as either sleepiness, dyspnea on exertion, weakness, generalized lack of energy, or feeling down or depressed can aid in evaluation and management.
- Laboratory evaluation rarely reveals a cause for fatigue but reasonable initial studies include complete blood count, basic metabolic panel, hepatic function testing, erythrocyte sedimentation rate, thyroid-stimulating hormone, ferritin, and screening for HIV and hepatitis C in at-risk populations.
- Even in the absence of anemia, in women of child-bearing age with a ferritin less than 50 ng/mL, iron replacement is associated with improvement of subjective fatigue.
- In situations where there is a low level of clinical concern for illness, additional diagnostic testing does not improve patient reassurance.

INTRODUCTION

Fatigue is a common symptom and the presenting concern for 5% to 10% of visits in primary care.[1] Time lost at work, medical visits, and evaluation result in significant costs to patients and society. Often the underlying cause of a patient's fatigue is not found, but rarely fatigue can be the initial symptom of a life-threatening disease, such as a yet undiagnosed malignancy or heart failure. For these reasons a guide to a rational, systematic approach to evaluation of fatigue is important.

HISTORY

History is the most important part of the evaluation of a patient presenting with fatigue and acts as a guide regarding the patient's subsequent work-up. The first key aspect is to define what the patient is describing; fatigue can be used by patients to describe

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sleepiness, dyspnea on exertion, weakness, generalized lack of energy, or feeling down or depressed. However, to a medical professional the term fatigue is typically defined as a generalized lack of energy that does not improve with sleep and gets worse with activity.

A 56-year-old man with obesity, hypertension, and osteoarthritis presents to clinic with fatigue. He reports that he feels "run down." He continues to take part in moderate daily exercise without chest pain or increased shortness of breath but he reports that when he sits at his desk he finds himself nodding off, "too fatigued to make it through the day" without a nap.

"Fatigue" can describe sleepiness; ask the patient if the sensation improves with naps and activity, if they are describing a frequent desire to fall asleep primarily when at rest. If so these symptoms are consistent with sleepiness, typically caused by an underlying sleep disorder, such as obstructive sleep apnea. The patient in this case has risk factors and symptoms suggestive of obstructive sleep apnea. Work has been done regarding components of the patient history that may help tease out if the symptom they are describing is sleepiness or fatigue (**Table 1**).

A 36-year-old woman with history of migraines presents with fatigue. She reports the fatigue is "ruining my life," she is sleeping poorly, feels too fatigued to get out of bed in the morning, too fatigued to eat, too fatigued to play with her kids. She becomes tearful as she discusses her symptoms.

Fatigue can be a symptom of depression, can be caused by a medical condition that coexists with a patient's depression, or can be a way that a patient describes a depressed mood. The fatigue this patient describes is suggestive of fatigue associated with depression. Further questioning may be helpful. Consider using the Patient Health Questionnaire-9 (**Fig. 1**), a well-validated tool that asks patients to describe the frequency of many symptoms of depression, including lack of energy. If the patient also reports many other symptoms of depression (anhedonia; feeling down, depressed, or hopeless; sleep and appetite changes, a feeling of guilt or failure) it is reasonable to focus your initial management on depression. After treatment of the depression reassess their fatigue and evaluate further if this symptom persists.

As can be seen this initial clarification regarding what the patient is describing with the word fatigue can quickly focus the differential diagnosis. An additional example is patients using the term fatigue to describe shortness of breath limiting their ability to be active, what a medical professional would describe as dyspnea on exertion,

Table 1
Questions to assist is differentiating fatigue from sleepiness

Sleepiness	Fatigue
How likely are you to doze off or fall asleep in the following situations, in contrast to just feeling tired?	How strongly do you agree with the following statements?
Sitting and reading	Exercise brings on my fatigue
Watching television	I start things without difficulty but get weak as I go on
Sitting inactive in a public place (eg, theater, meeting)	I lack energy
As a passenger in a car for an hour when circumstances permit	
Sitting and talking to someone	
Sitting quietly after lunch without alcohol	

Adapted from Bailes S, Libman E, Baltzan M, et al. Brief and distinct empiric sleepiness and fatigue scales. J Psychosom Res 2006;60:605–13.