

Expert Opinion

Disability and Chronic Migraine

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Headache specialists are well familiar with the pain and suffering associated with chronic migraine that can be difficult to control. However, we are less familiar with definitions of impairment and disability and how to determine when or if chronic migraineurs qualify for disability under Social Security Disability and private policies.

CLINICAL HISTORY

We report on a 38-year-old woman with a history of migraine since her teens, which were episodic but have become daily in the last few years, lasting most of the day with an intensity of 4-10/10 associated with nausea, occasional vomiting, and occasional visual auras. The patient had tried a variety of preventive medications and Botox injections without benefit. The patient was taking a triptan several times a week with some benefit. On other days, she took nothing or, occasionally, ibuprofen that might dull the pain. The patient had gone up to 6 months taking non-narcotic, non-opiate symptomatic medications no more than twice a week and the frequency was not

any less. An in-hospital regimen of intravenous dihydroergotamine (DHE) was of only temporary benefit. The patient is an accountant and reported great difficulty concentrating at work because of the headaches. She had missed a few days per month when the headaches were severe. She brought paperwork from her company's temporary disability policy, which she asks me to complete.

QUESTION

What is the difference between impairment and disability? Do migraines qualify for disability under Social Security Disability and private policies? What criteria should the physician use in individual cases in deciding?

EXPERT OPINION

What is the Difference Between Impairment and Disability?—With treatment seemingly at an end point, and the ability to restore her premorbid functioning unavailable medically, it is not surprising the patient would look to disability as an alternative to the impossible task of reconciling work demands with impairments from migraines.

Of course, she is not alone in this; her experience of being unable to function at work due to migraines is widely shared. People with frequent or severe headaches have an unemployment rate between 2.5 and 4 times the regional average.^{1,2} Migraineurs tend to

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have lower socioeconomic status than the migraine-free population, and people with chronic migraine lose between 15 and 20 workdays annually.³⁻⁵ In the American Migraine Prevalence and Prevention Study (2005 survey), 18% of respondents with chronic migraine were on medical leave from work, vs 9% of those with fewer than 3.3 headache days per month.⁶

For the individual case, however, it is helpful to proceed from the definition of disability. For most government programs and private policies, this traces back to the American Medical Association's *Guides to the Evaluation of Permanent Impairment*.⁷ The *Guides* distinguish among 3 concepts:

- An impairment, which is the loss, loss of use, or derangement of any body part, organ system, or organ function
- A functional limitation, which is a difficulty in the performance of a specific activity, such as walking or driving, due to an impairment
- And a disability, which is an alteration in one's capacity to fulfill personal or societal needs, or to meet statutory or regulatory requirements, on account of an impairment.

Thus, an impairment, as a condition of anatomy (eg, an amputation) or physiology (eg, congestive heart failure), can be understood in medical terms. Disability, however, is influenced by numerous nonmedical variables. Psychological resources (eg, problem-solving capacity, emotional resilience, and communication skills) and other personal resources (eg, being able to afford adaptive equipment) can affect disability. Relevant, too, are the characteristics of the physical environment (eg, whether the workplace has bright fluorescent lights and diesel fumes, or whether public transportation is available) and the social environment (eg, Are one's boss and coworkers supportive?).

For unlike impairment, disability is not a medical term. In fact, it does not pertain to the same level of analysis as medicine, for while medical diagnosis and treatment are of an individual, disability is a statement about the interaction between the individual and their environment.⁸

Do Migraines Qualify for Disability Under Social Security Disability and Private Policies?—Social Security Disability, the Railroad Retirement Act, and many private disability plans rest on the *AMA Guides to the Evaluation of Permanent Impairment*. More exactly, under the Code of Federal Regulations (CFR), to qualify for Social Security Disability there must be (20 CFR 404.1505):

- The inability to engage in any substantial, gainful activity
- By reason of a medically determinable physical or mental impairment(s)
- Which can be expected to result in death
- Or which has lasted or can be expected to last for a continuous period of not less than 12 months.

There are a number of barriers to claims based on migraines. First, the disability needs to derive from a medically determinable impairment, which by the Code of Federal Regulations is based on "medical evidence consisting of signs, symptoms, and laboratory findings . . . not only by the individual's statements of symptoms" (20 CFR 404.1529). Because there is currently no laboratory confirmation for migraine in clinical use, the existence of the disorder is harder to establish legally. This is compounded by the fact that there is at present no listing for migraines (or, in fact, any headache disorder, except as a symptom of toxoplasmosis or as a side effect of antiretroviral treatment) among the qualifying conditions for Social Security Disability (20 CFR 404, Appendix 1).^{9,10}

Balancing this out, however, are 3 ameliorating factors. The first is the standard of evidence used in Social Security Disability cases: "Substantial evidence," meaning that a "reasonable mind, given the evidence, could have reached the conclusion." It does not mean that a reasonable mind would be compelled to reach the conclusion or that it was the only possible conclusion. It does not even mean that we agree with the conclusion – only that it was reasonable.^{11,12}

The second is that in matters of law, each level in the judicial system defers to the court above it. The administrative law judge defers to the district court, the district court defers to the circuit court, and the

circuit court defers to the Supreme Court. However, for making a factual determination, the deference goes in the other direction. The Supreme Court defers to the circuit court and so on down to the administrative law judge, who defers to the treating physician. The logic is that with each step down the hierarchy, one comes to a person who is closer to the evidence, who has access to more evidence, and who has more experience evaluating this type of evidence.¹¹ Further, the revisions to Social Security Disability enacted by Congress in 1984 require that controlling weight be given to the evidence from the claimant's treating health-care provider so long as it is consistent with the record as a whole (20 CFR 404.1527 [e] [1] [ii]).

The third ameliorating factor is that the 1984 revisions require that determinations include the applicant's "ability to function in a work-like setting," and not only the degree of medical impairment (42 United States Code 423 [f]). Thus, mental illness and pain, even though they are subjective, and the combined effects of multiple impairments, are all relevant to determining disability once an impairment has been established.¹³ Further, the availability of jobs in the national economy that the claimant could perform is also part of the disability determination process (20 CFR 404.1520 [a] [4]).

Thus, the steady increase in Social Security Disability rolls by 59%, from 6.7 million to 10.6 million individuals between fiscal years 2000 and 2011 (the US population grew by 9.7% during this same period), is not *prima facie* evidence of fraud, but may simply reflect deteriorating labor market conditions.^{14,15} Between 2009 and 2011, twice as many people applied for Social Security Disability as started new jobs.¹⁵

The determination standards for private disability plans depend on the individual policy. "Self-reported" conditions such as chronic pain may be disallowed, or covered at a reduced or more time-limited level of benefits.^{16,17} In practice, however, the treating physician's role is roughly the same as in Social Security Disability: to indicate the diagnosis, prognosis, impairments, medical restrictions, and residual functional capacity. In 2011, about 880,000 policyholders collected long-term disability payments, up 10% from 2007.

What Criteria Should the Physician Use in Individual Cases in Deciding?—There is a tension, then, between the CFR, which requires objective evidence, and the purpose of the process, which is to answer whether it is reasonable that the person receive disability, with deference to the evidence from the treating physician.

In case law, this tension is handled in two ways. The first is to adopt a lenient interpretation of "laboratory evidence," including, for example, the tender point examination in fibromyalgia under this rubric.¹⁶ The second is to base the disability determination on the credibility of the claim – the consistency of the claimant's reports with each other, with behavior outside the exam room (if this is known), with the disorder, and with the level of disability usually entailed by the disorder.¹⁸

The treating professional provides evidence for the disability determination process – historical, clinical, and laboratory findings, diagnosis, and statements of functional limitations (20 CFR 404.1513 [b] and 1513 [c] [1]).¹⁹ Particularly relevant to a claim are 3 types of information:

- A judgment on the plausibility that the patient is disabled
- Objective signs, no matter how faint, verifying that the disorder – a medically determinable impairment – is present. Slight autonomic signs, distention of the superficial temporal artery, or mechanical or cold allodynia would likely all qualify
- Documentation of any comorbidities, such as depression or generalized anxiety disorder, as disability can be based on a combination of impairments.

Is the Patient Disabled?—The experience in treating her suggests that she has chronic, refractory migraines, which carry risk of disability. Factors that independently predict occupational disability in migraine include headache frequency and intensity, associated symptoms such as nausea, and a catastrophic reaction to head pain.^{6,20,21} Catastrophic thinking is unknown here, but she reports high headache frequency, high average pain intensity, and nausea. In chronic migraine, there is suggestion that

work impairment increases exponentially with age, which may account for her increasing sense of disability over time.²² Further, her report of difficulty concentrating seems entirely plausible. Migraine with aura may be associated with cognitive impairment and during attacks, a migraineur may perform poorly on a mental status exam.^{23,24}

However, qualifying for Social Security Disability will likely hinge on whether she retains some work capacity, as it sounds like she is able to function at her job on most days. Exceptions would be if she were in protected employment (eg, working for a family member who provides a level of leniency not usually available), or if, on account of absenteeism, she is earning below the level of Substantial Gainful Activity (currently \$1040 per month for individuals who are not blind, \$1740 per month for individuals who are), or of course if she lost her job due to migraine-related performance issues.²⁵

Moreover, applying for disability may not be in her long-term interests. Cases involving chronic pain tend to go through several levels of adjudication and appeal, taking up to 3 years to resolve.²⁶ During this time, she would need other ways of supporting herself. If her claim were not successful, her capacity to return to work would be lowered by the lengthy period of absence.²⁷

If she is awarded disability, it may not be the haven she would anticipate. True, it would provide the significant benefit of health insurance (Medicare starting 2 years from the date of disability) and a basic level of income security (an average of \$1130 per month, depending on the wage history).²⁸ But disability can also carry the cost of isolation, stigmatization, loss of role, depression, anger, and sometimes substance abuse.²⁹

Further, although receiving Social Security Disability generally makes a person higher priority for the vocational rehabilitation system, disability from headache does not seem to remit easily. In a 3-year prospective population study, 92% of patients with moderate or high headache-related disability remained disabled after 3 years. Only 12% of initially non-disabled subjects became disabled over the same interval.² Among Social Security Disability recipients more generally, only about 0.7% per year leave the

program because they are no longer disabled.³⁰ For those on employee-sponsored disability plans the level is somewhat higher, but still very low, with 20% per year returning to the workforce.³¹ Patients may feel that in applying for disability, they are giving up and accepting a permanent shift in role and identity, and they may be correct.

There are also the unknowns surrounding the Social Security system itself. Social Security Disability has greatly expanded in coverage and cost since passage in 1956 as a program paying benefits only to those aged 50 years or older and not including benefits for the dependents of disabled workers.³² This was particularly true with the 1984 revisions, as noted above. In March, 2013, about 5.4% of the civilian workforce aged 25 to 64 years was receiving Social Security Disability compared with 1.7% in 1970.³³ In 2012, Social Security paid out approximately \$140 billion to disabled workers and their spouses and children; related Medicare costs were about \$80 billion.^{33,34} In contrast, the Disability Trust Fund took in only \$109 billion.³⁴

Thus, at this writing, the trust fund for Social Security Disability is projected to be exhausted in 2016.³⁵ This is certainly solvable, although it will require an act of Congress to do so. The disability trust fund was close to depletion in the late 1980s, until the percentage of Social Security taxes that go to disability (rather than to the retirement, "Old Age and Survivors" trust fund) was increased from 9.7% to 14.5% in 1990.¹³ Presumably, as the latter fund is projected to be exhausted in 2033, other solutions such as raising the upper threshold for Federal Insurance Contributions Act taxes, reducing the cost of living adjustments, or restricting benefits to low- and middle-income individuals will be adopted instead.

Alternatives to Disability.—That disability pertains to the interaction between the individual and their environment raises the question of whether there are personal or workplace factors that are bringing this patient to the point of disability. Are there new time pressures at work or at home? Is there a difficult coworker or a new and less understanding boss? Is there new onset depression that may be impeding problem solving? Conversely, remaining

employed despite pain is often a matter of flexible coping by the worker and flexibility around ergonomics and scheduling by the employer.³⁶ Thus, reducing distress and fostering communication with the workplace can be central to preventing disability.

Although her migraines are chronic, her pain intensity varies over a wide range, and the disability appears episodic. This fits well with the Family and Medical Leave Act (FMLA), which can be taken intermittently. FMLA is unpaid, but if she only needs it a few days a month, it may be financially preferable to short-term disability, and would allow her to remain connected to the workplace. Migraines are an accepted source of disability under FMLA, and are substantiated simply by the physician's statement of diagnosis, symptoms, health-care visits, and ongoing treatment, on Form WH-380-E (29 CFR 825.306). FMLA only applies to employers with 50 or more workers in a 75-mile radius, however, and to an employee who has been with the firm for at least a year, and at least 1250 hours in the past year (29 United States Code 2611-2614). Still, it is a model for flexibly negotiating the seemingly impossible task of reconciling work demands with impairments from migraines.

The Americans with Disabilities Act (ADA; 42 United States Code 12101) can be another avenue for preventing disability. The ADA outlaws discrimination by an employer against an otherwise qualified individual with a disability, and mandates reasonable accommodations, provided they do not pose a significant burden to the operation of the business. The ADA applies only to companies with at least 15 employees and, unlike FMLA, does not require accommodating unpredictable absences. As with FMLA, however, the active ingredient in the law may be the communication it encourages. By statute, the accommodations, which are often quite inexpensive, arise from good faith discussions with the workplace, initiated by the employee.

Thus, we must ask our patient whether there are specific factors at work that seem to be triggering her migraines, or making it harder to function with a migraine. Problems with the lighting, computer screen, work schedule, or a coworker's perfume might yield to constructive dialogue.

If it is truly clear that remaining at the job with chronic migraines has become an unsolvable problem then, with an eye to the long and unpredictable process of a Social Security Disability claim, and the weak income that it provides, vocational rehabilitation – successful about 62% of the time – may be a preferable, parallel track.³⁷ Vocational rehabilitation would seek to incorporate her interests, personality, training, transferable skills, and even her identity, into a new job or, if need be, career.

REFERENCES

1. Stang P, Von Korff M, Galer BS. Reduced labor force participation among primary care patients with headache. *J Gen Intern Med.* 1998;13:296-302.
2. Von Korff M, Ormel J, Keefe FJ, Dworkin SF. Grading the severity of chronic pain. *Pain.* 1992; 50:133-149.
3. Breslau N, Rasmussen BK. The impact of migraine: Epidemiology, risk factors, and comorbidities. *Neurology.* 2001;56(Suppl. 1):s4-s12.
4. Bigal ME, Serrano D, Reed M, Lipton RB. Chronic migraine in the population: Burden, diagnosis, and satisfaction with treatment. *Neurology.* 2008;71:559-566.
5. Fiare I, Haugland ME, Stovner LJ, Zwart J-A, Bovim G, Hagen K. Sick leave is related to frequencies of migraine and non-migrainous headache – The HUNT study. *Cephalalgia.* 2006;26:960-967.
6. Stewart WF, Wood C, Manack A, Varon SF, Buse DC, Lipton RB. Employment and work impact of chronic migraine and episodic migraine. *J Occup Environ Med.* 2010;52:8-14.
7. Cocchiarella L, Andersson GBJ. *Guides to the Evaluation of Permanent Impairment*, 5th edn. Chicago: AMA Press; 2001.
8. Brandt EN Jr, Pope AM. *Enabling America: Assessing the Role of Rehabilitation Science and Engineering*. Washington, DC: National Academy Press; 1997.
9. Social Security Administration. Disability Evaluation Under Social Security. Blue Book. September, 2008. Available at: <http://www.ssa.gov/disability/professionals/bluebook/11.00-Neurological-Adult.htm> (accessed February 20, 2013).
10. Social Security Administration. 2013 Blue Book. 2013. Available at: <http://www.Socialsecurity.gov/disability/professionals/bluebook/11.00-Neurological-Adult.htm> (accessed October 6, 2013).

11. Denlow M (2007). Substantial Evidence Review in Social Security Cases as an Issue of Fact. *Federal Courts Law Review*, 3.
12. Dietz LH, Jacobs A, Leming T, Shampo J, Surette E (2013). Administrative Law. Section 358. Sufficiency and weight of evidence. *American Jurisprudence* (2nd ed.). NY: West Publishing/Thomson Reuters.
13. Autor DH, Duggan MG. The growth in the Social Security Disability rolls: A fiscal crisis unfolding. *J Econ Perspect*. 2006;20:71-96.
14. Social Security Administration. Social Security beneficiary statistics. 2012. Available at: <http://www.ssa.gov/OACT/STATS/OASDIbenies.html> (accessed February 20, 2013).
15. Swank DA. Money for nothing: Five small steps to begin the long journey of restoring integrity to the Social Security Administration's disability programs. *Hofstra Law Rev*. 2012;41:155-180.
16. Finch M. Law and the problem of pain. *Univ Cinci Law Rev*. 2005;74:285-327.
17. Martin DP. The subtle snake: Long-term disability insurance under ERISA. *Alabama Lawyer*. 2005;66:279-287.
18. Schneider EK, Simeone JJ. Pain and disability under Social Security: Time for a new standard. *J Health Law*. 2001;34:459-485.
19. Pashler CE. Mirror, mirror on the wall: Stigma and denial in Social Security Disability hearings. *Univ Memphis Law Rev*. 2012;43:419-478.
20. Lipton RB, Buse DC, Saiers J, Fanning KM, Serrano D, Reed ML. Frequency and burden of headache-related nausea: Results from the American Migraine Prevalence and Prevention (AMPP) study. *Headache*. 2013;53:93-103.
21. Holroyd KA, Drew JB, Cottrell CK, Romanek KM, Heh V. Impaired functioning and quality of life in severe migraine: The role of catastrophizing and associated symptoms. *Cephalalgia*. 2007;27:1156-1165.
22. Serrano D, Manack AN, Reed ML, Buse DC, Varon SF, Lipton RB. Cost and predictors of lost productive time in chronic migraine and episodic migraine: Results from the American Migraine Prevalence and Prevention (AMPP) study. *Value Health*. 2013;16:31-38.
23. O'Bryant SE, Marcus DA, Rains JC, Penzien DB. Neuropsychology of migraine: Present status and future directions. *Expert Rev Neurother*. 2005;5:363-370.
24. Meyer JS, Thornby J, Crawford K, Rauch GM. Reversible cognitive decline accompanies migraine and cluster headaches. *Headache*. 2000;40:638-646.
25. Social Security Administration. 2013 Red Book. 2013. Available at: <http://www.socialsecurity.gov/redbook/eng/definedisability.htm> (accessed February 20, 2013).
26. Tulu B, Horan TA. The electronic disability record: Purpose, parameters, and model use case. *J Am Med Inform Assoc*. 2009;16:7-13.
27. Autor DH, Maestes N, Mullen K, Strand A (November 2011). Does delay cause decay? The effect of administrative decision time on the labor force participation and earnings of disability applicants. Working Paper. Massachusetts Institute of Technology.
28. Social Security Administration. OASDI program: Average benefit amounts, 2012. In: *Fast facts and figures about Social Security, 2013*. Washington, DC: Social Security Administration; 2013:22. Available at: http://www.ssa.gov/policy/docs/chartbooks/fast_facts/2013/fast_facts13.pdf (accessed October 6, 2013).
29. Livneh H, Antonak RF. Psychological adaptation to chronic illness and disability: A primer for counselors. *J Couns Dev*. 2005;83:12-20.
30. Autor DH. The unsustainable rise of the disability rolls in the United States: Causes, consequences, and policy options. 2011. National Bureau of Economic Research. Working Paper #17697.
31. Scism L. Fewer stay out in private disability plans. *WSJ*. April 7, 2013.
32. Berkowitz ED. Disability policy and history. Statement before the Subcommittee on Social Security of the Committee on Ways and Means. July 13, 2000. Social Security. The Official Website of the U.S. Social Security Administration. Available at <http://www.ssa.gov/history/edberkdib.html> (accessed April 22, 2013).
33. Scism L, Hilsenrath J. Workers stuck in disability stunt economic recovery. *WSJ*. April 10, 2013.
34. Social Security Administration. General information: Trust fund operations, 2012-2013. In: *Fast facts and figures about Social Security, 2013*. Washington, DC: Social Security Administration; 2013:10. Available at: http://www.ssa.gov/policy/docs/chartbooks/fast_facts/2013/fast_facts13.pdf (accessed October 6, 2013).

35. Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds. *2012 Annual Report*. Washington, DC: U.S. Government Printing Office; 2012.
36. de Vries HJ, Reneman MF, Groothoff JW, Geertzen JHB, Brouwer S. Factors promoting staying at work in people with chronic nonspecific musculoskeletal pain: A systematic review. *Disabil Rehabil*. 2012; 34:443-458.
37. Dutta A, Gervy R, Chan F, Chou C-C, Ditchman N. Vocational rehabilitation services and employment outcomes for people with disabilities: A United States study. *J Occup Rehabil*. 2008;18:326-334.