Complementary and Alternative Medicine in Multiple Sclerosis

Case Presentation:

A 34-year-old female with a history of multiple sclerosis (MS) returns to the neurology clinic for follow-up.

The patient was diagnosed with MS at the age of 28 after she presented with various neurologic problems, including optic neuritis. She has done well on daily glatiramer acetate injections. Her greatest problem has been persistent paresthesia in the legs. The paresthesia is very bothersome and interferes with her work and sleep. Unfortunately, the paresthesia has not responded to various medications, including gabapentin, tricyclic antidepressants, and pregabalin. She spoke to a friend in her support group, who advised her that the American Academy of Neurology (AAN) had recently issued recommendations with regard to complementary and alternative medicine (CAM) therapies for treating MS symptoms.[1] Aside from her paresthesia, she also complains of stiffness in her legs but denies any other complaints, including double vision, extremity weakness, bladder complaints, or swallowing difficulties. She is tolerating the glatiramer acetate injections.

Her past medical history includes MS and seasonal allergies. Otherwise, she denies any chronic illness.

She takes oral contraceptives, glatiramer acetate injections, and pregabalin.

She has no known drug allergies.

She does not smoke, drink alcohol, or use illicit substances. She is a mortgage broker.

There is no family history of neurologic diseases.

In addition to what is noted above, a complete 14-topic review of systems was obtained and was unremarkable.

On physical examination, she is a well-developed and well-nourished female in no distress. She is afebrile. Her blood pressure is 118/60, pulse is 72, and respiratory rate is 12.

No bruits are heard over her neck. There are no murmurs or abnormal heart sounds.

She is alert and oriented to person, place, and date. Registration and 5-minute recall are normal. She follows commands and names and repeats without difficulty. Her speech is fluent.

Cranial nerve testing reveals a left afferent pupillary defect; she has pallor of her left optic disc, and the right optic disc is normal. Visual fields are full to confrontation, and extraocular muscles are intact. Facial sensation is normal. She has no facial weakness. Hearing is intact bilaterally to finger rub. Palate, tongue, and uvula are midline. Shoulder shrug strength is normal.

Motor strength is MRC grade 5/5 throughout. Tone is mildly increased in the legs and normal in the arms.

Sensory examination shows reduced vibratory perception in the toes, ankles, and knees; she has a T10 pinprick sensory level.

Reflexes are 3/4 in the arms and legs. Plantar responses are extensor bilaterally.

Coordination is normal on finger–nose–finger and heel–knee–shin testing bilaterally.

Her gait appears mildly spastic but steady.

Review of recent diagnostic studies reveals a normal vitamin D level. Recent MRI of her brain and spine shows chronic changes consistent with MS. There are no enhancing lesions, and the images are unchanged from a prior study performed 2 years ago.

You discuss with the patient that her paresthesia has unfortunately not responded to the typical medications used to treat this problem. At this point, the patient describes her frustration with taking more medicines. She expresses an interest in trying the complementary therapies her friend discussed with her. She was also advised by one of her friends to consider exploring medical marijuana for her leg stiffness, as she has significant side effects from most other drugs that her neurologist has prescribed for leg stiffness. You explain that the recently published AAN guideline on CAM use in MS suggests reflexology is possibly effective for reducing paresthesia.[1] Reflexology involves applying manual pressure to the feet to alleviate symptoms. After some discussion, the patient elects to pursue it. She also agrees to continue the pregabalin.

You also discuss the evidence for medical marijuana in pill or oral spray form for the leg stiffness that appears to be related to the spasticity, as seen on her examination.[1] The patient has additional questions about the role of fish oil supplements in MS and wants to try taking them, as she has heard about benefits of fish oil supplements on an internet forum.

Questions[1]

1. What does the current evidence show about possible use of medical marijuana for treatment of spasticity in patients with MS?
A. Medical marijuana improves spasticity short-term, as evidenced by physician-administered tests.
B. Medical marijuana improves spasticity short-term, as reported by the patients on the study surveys.
C. Medical marijuana does not help spasticity-related symptoms.
D. Medical marijuana can worsen spasticity-related symptoms.

E. None of the above.

The correct answer is B. Medical marijuana improves spasticity short-term, as reported by the patients on the self-reported outcomes in the studies. There was no short-term improvement in the examiner-conducted objective measures of spasticity in these studies.

2. With regard to the use of reflexology for paresthesia (tingling, numbness, and other unusual skin sensations) in MS, which of the following is correct?
A. There is strong evidence that reflexology might help lessen paresthesia.
B. There is moderate evidence that reflexology might help lessen paresthesia.
C. There is weak evidence that reflexology might help lessen paresthesia.
D. There is not enough information to support or refute the use of reflexology in the treatment of paresthesia in patients with MS.

The correct answer is C. There is weak evidence that reflexology might help lessen paresthesia in MS (Level C, one Class II study).

3. According to the AAN evidence-based guideline about CAM use in MS, which of the following statements about use of omega-3 fatty acids (e.g., fish oil supplementation) in MS is true?
A. There is weak evidence that fish oil supplements do not help with MS relapses, disability, or MRI lesions.
B. There is weak evidence that fish oil supplements do not help treat fatigue or improve quality of life.
C. Omega-3 fatty acids do not appear to have significant side effects.
D. All of the above.

The correct answer is D. On the basis of the studies included in the guideline, all of the above statements about use of omega-3 fatty acids in MS are true.

Diagnosis Coding[2,3]

MS is represented as a three-character code in both ICD-9-CM (**340**) and ICD-10-CM (**G35**). There have been intermittent attempts to further subdivide the code into specific types of MS, but with the lack of an official international classification (as we have for sleep disorders, headache, and epilepsy) the three-character code remains for now. Remembering a three-character code for all MS is obviously easier for clinicians.

With the advent of risk-adjusted population payments, the severity of illness in a neurologist's group of patients becomes important both for resources available to treat that population and reimbursement to the neurologist. Also, approval of treatments by payers may be dependent on documenting disease severity or type. Our best current means for adding some information regarding severity to the diagnosis of MS is to add ICD-9-CM codes (ICD-10-CM codes after October 1, 2014) for manifestations.

The medical record for the patient discussed in this case presentation should include as the diagnostic statement (problem list) the MS, paresthesia, and spastic gait. A history of optic neuritis is noted, as is optic disc pallor, so optic atrophy would be listed had it actually been addressed in the visit.

There are not good codes for spasticity alone in ICD-9-CM or ICD-10-CM. "Spasticity" is indexed to 781.0, Abnormal involuntary movements in ICD-9-CM and R25.2, Cramp and spasm in ICD-10-CM. We do, however, have a code for gait disturbance (which includes spastic gait) in ICD-9-CM and an even better code for spastic (paralytic) gait in ICD-10-CM. Had paraparesis been documented, codes for that could have been used as well, and those codes for some diseases are even more influential in indicating severity.

The final coding, given the assumed diagnostic statement, is:

ICD-9-CM

340	Multiple sclerosis
781.2	Abnormality of gait
782.0	Disturbance of skin sensation

ICD-10-CM

G35	Multiple sclerosis
R26.1	Paralytic gait
R20.2	Paresthesia of skin

Evaluation and Management (E/M) Coding

Family of services is Established Outpatient. The level of service is based on two of the three main categories documented: History, Exam, and Medical Decision Making.

The note documents a Chief Complaint, four facts about History of Present Illness, Past Medical (list of medications), Social History, and refers to a 14-point Review of Systems. Some auditors would want the 10 or 14 systems or their symptoms to be enumerated, which is not documented here, and the absence of that could be a problem for some auditors. Otherwise, this qualifies as a Comprehensive History.

The physical exam includes 22 elements. That would be sufficient for a Detailed exam for a level 3 visit if based on the exam. The Comprehensive neurologic exam is missing fund of knowledge. If the exam were based on the general medical exam, more than the seven organ systems described here would be needed. As is, the description of the seven systems is enough for a Detailed exam and a level 3 visit. If a Comprehensive exam were desired, the documentation would have had to include another organ system, such as listening to lung sounds or commenting on skin findings.

Medical Decision Making (MDM) includes reviewing a blood test and MRI report, which is Low for Data reviewed. If the documentation stated that the physician reviewed the MRI images themselves, then the Data reviewed would have been High. The Problem type is established, and

the note did poorly at defining whether there was worsening. In the absence of stating that there was worsening, the presentation will be rated Established Stable, a Low Problem category. Risk is Moderate for prescription medication management and a chronic problem with a mild exacerbation. MDM is set at the middle level of the three categories: Low Data reviewed, Low Problem category, and Moderate Risk. Therefore MDM is Low, which qualifies for a level 3 visit. It could have qualified higher if the physician documented that the MRI images were reviewed, or that the patient was worse now because of the paresthesia.

This E/M visit is coded as a 99213, established outpatient visit. It could have been coded higher if the physician had documented the exam as Comprehensive by listening to the chest, examining the skin, or documenting the fund of knowledge. It also could have been higher if the physician had documented that the MRI images were personally reviewed, or that the patient was worse this visit because of the paresthesia.

If the visit took at least 25 minutes and more than half the time was counseling, then the service could have been documented at a higher level of service if the counseling time was formally documented: "More than half of this XX minute visit was spent counseling the patient on YY and ZZ." Return visits require at least 25 minutes for level 4, 99214, and require at least 40 minutes for level 5, 99215, when the Counseling time method is used.

1. Yadav V, Bever C Jr, Bowen J, et al. Summary of evidence-based guideline: Complementary and alternative medicine in multiple sclerosis. Report of the Guideline Development Subcommittee of the American Academy of Neurology. Neurology® 2014;82:1083–1092.
2. Centers for Disease Control and Prevention. International classification of diseases, ninth revision, clinical modification (ICD-9-CM). *www.cdc.gov/nchs/icd/icd9cm.htm.*
3. Centers for Disease Control and Prevention. International classification of diseases, tenth revision, clinical modification (ICD-10-CM). *www.cdc.gov/nchs/icd/icd10cm.htm.*

This guideline was endorsed by the Consortium of Multiple Sclerosis Centers and the International Organization of Multiple Sclerosis Nurses.

Disclaimer

This statement is provided as an educational service of the American Academy of Neurology. It is based on an assessment of current scientific and clinical information. It is not intended to include all possible proper methods of care for a particular neurologic problem or all legitimate criteria for choosing to use a specific procedure. Neither is it intended to exclude any reasonable alternative methodologies. The AAN recognizes that specific patient care decisions are the prerogative of the patient and the physician caring for the patient, based on all of the circumstances involved.