

## Welcome to Our Latest Edition

*Our goal is to provide a medium for VA MS professionals to share expertise and improve care for MS patients. We welcome your thoughts, comments, and participation.*

*Please pass this issue along. If you know someone who wishes to be included on the electronic distribution list, forward the email address to the editor.*

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## A Letter from the VA-SIG Chair

Dear Colleagues,

Summer has quickly passed and there is so little time to do so much. The VA-SIG will be restructuring this year and your input is very valuable. If you would like to be a member or if you did not have a chance to update your personal information at the Consortium of Multiple Sclerosis Centers (CMSC) meeting this summer, please contact Paul Gutierrez, MD (Paul.Gutierrez@va.gov).

The VA-SIG is working to coordinate our activities with both Multiple Sclerosis Centers of Excellence (MSCOE). The MSCOE–West hosted the annual coordinators’ meeting in Portland September 15–16. The MSCOE–East met in Baltimore September 17–19. Planning for next year’s CMSC annual meeting has already begun.

On another subject, Tysabri will be returning to the market in the very near future. It will be available only to those physicians and facilities that have completed the “TOUCH” program and have become registered to prescribe. I am very interested in knowing how many of us will be able to participate and would like to share those experiences with those who will not be registered.

Sincerely,

Peggy A. Coffey, MD  
peggy.coffey@va.gov  
VA-SIG Chair

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*In this issue we begin a series of articles to help clinicians diagnose and treat MS. An article on MS sub-types will be published next quarter.*

## Multiple Sclerosis: A Difficult Diagnosis

Multiple sclerosis is one of the most challenging diagnoses that physicians face. Symptoms vary widely among patients and the timing of these symptoms is different for each case. Furthermore, many other diseases have some of the same symptoms as MS. There are only about 400,000 cases in the entire United States, which means that most doctors have never seen the disease. With many health-care providers being unfamiliar with the disease, and with the variability in symptoms, laboratory tests have become important in helping

make an accurate diagnosis. Of these laboratory tests, MRI imaging is the most important.

However, MRI has its limitations. Areas of brain damage have an increased signal on the MRI image, which corresponds to a white spot on the pictures. Unfortunately, the cause of the MRI changes cannot be determined based on imaging alone. Many different types of brain disease appear as white spots, so seeing these changes alone does not allow one to determine which disease caused them. There are particular patterns of change that make a diagnosis of MS more likely, but there is no pattern that cannot be seen with other diseases. Additionally, many normal people have changes on MRI, and these increase with age. Separating these normal MRI changes from early brain disease is often impossible.

Because of the limitations of the medical history, physical examination, and laboratory tests, criteria have been developed to guide physicians in making the diagnosis of MS.

There have been many criteria over the past several decades. For years the Poser criteria were used. The Poser criteria were developed before MRI imaging was developed, which greatly limited their usefulness. To address the changes in technology as well as our increased understanding of MS, the National MS Society

convened an international panel of experts to update the criteria for diagnosing MS. This panel revised the criteria based on the results of many research studies that have been done to determine what patients and MRI imaging characteristics best predict who truly has MS. These criteria were published in 2001 and are known as the McDonald criteria (named after the chair of the committee, *Ann Neurol* 2001; 50:121–7).

The McDonald criteria require that patients have involvement of more than one location in the nervous system. They also require that changes occur over time. It is important for any change to be accompanied by objective findings on examination or laboratory testing. The most difficult criterion requires that there be no other explanation for the findings. If a patient has only a single event in time, the diagnosis cannot be made until a second event occurs. Likewise, if there is only a single location within the nervous system, the diagnosis cannot be made unless a second location becomes involved.

Imaging with MRI plays a prominent role in the McDonald criteria. MRI may be used to detect additional areas of the brain that are involved. The findings that are required for an MRI to demonstrate involvement of multiple areas of the brain are quite rigorous.

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### For this Newsletter:

***What would you like to see here?***

Please SUBMIT:

- Forum topics
- Clinical questions
- Research topics
- Ongoing MS projects
- QI issues
- Outcome measurements
- Team initiatives
- Announcements

Please contact the VA-SIGNature editor, Deborah Downey, NP, at [deborah.downey@va.gov](mailto:deborah.downey@va.gov).

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These requirements are based on a well-done research study of what changes best predict who will go on to develop MS. These MRI requirements are sometimes known as the Barkhof criteria. Likewise, the requirements for using the MRI to determine changes in lesions over time are also rigorous. These are based on research studies performed to identify the optimal timing of MRI imaging.

The McDonald criteria have performed well during the five years since their publication. Some minor questions remained about some of the finer points of the criteria. These were addressed in a revision of the criteria in 2005 (*Ann Neurol* 2005; 58:840–6). During this revision, some of the wording of the McDonald criteria was clarified. Additional recommendations regarding the timing of MRI scanning were added, as were recommendations for MRI imaging

of the spinal cord. The use of cerebrospinal fluid analysis in primary progressive MS also was addressed.

The original and revised McDonald criteria have been an important advance in the diagnosis of MS. These criteria have led to earlier diagnosis of MS compared to diagnosis using previous criteria. Though the disease can now be diagnosed earlier, this has not come at the

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## LITERATURE REVIEW

*In this issue we begin a quarterly review of recent MS literature. This quarter we feature nursing literature.*

**Cheung, J. and P. Hocking. "Caring as worrying: the experience of spousal carers,"**

*Journal of Advanced Nursing* 47(5) (2004): 475–482.

Ten spousal caregivers of persons with multiple sclerosis participated in this study, which found worry as part of caring. The findings provide insight into the concerns and worries a caregiver faces when caring for a partner who has MS.

**Cox, D. "Managing self-injection difficulties in patients with relapsing-remitting multiple sclerosis,"**

*Journal of Neuroscience Nursing* 38(3) (June 2006): 167–171.

This continuing education article addresses the common barriers to self-administered disease-modifying drugs. Topics covered are anxiety response, allaying fears, cognitive reframing, vasovagal response, feelings of disgust, pain, and side effects.

**Ridley, B. and P. Rawlins. "Intrathecal Baclofen Therapy: Ten steps toward best practice,"**

*Journal of Neuroscience Nursing* (38)2 (April 2006): 72–82.

This continuing education article is a thorough review of intrathecal baclofen therapy from a nursing perspective. The article addresses 10 important recommendations regarding IT therapy from the design of the team through the implant process to the support staff necessary for follow-up care.

**Finlayson, M., T. Van Denend and E. Hudson. "Aging with multiple sclerosis,"**

*Journal of Neuroscience Nursing* 36(5) (October 2004): 245–251.

Health concerns and service needs of 27 people with MS 55 years of age and older were studied. Participants believed they had less freedom and required more assistance than same-age peers who do not have MS. Areas of unmet needs were in the areas of housework, physical therapy, MS support groups, religious service attendance, information, check-in services, assistive technology use, social activities, personal care, and care coordination.

**Chesla, C. "Nursing science and chronic illness: Articulating suffering and possibility in family life,"**

*Journal of Family Nursing* 11(4) (November 2005): 371–387.

The author writes about families living with a member who has a chronic illness. She describes the shared experiences of hope, despair, suffering, and possibility and discusses these from the standpoint that chronic illness represents a breakdown for patients in their everyday lives and how they vacillate in the paradox of their experiences.

Anne Bateman, RN, NP  
anne.bateman@va.gov

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expense of an increased number of people falsely labeled with the diagnosis.

Despite the success of the McDonald criteria, additional problems remained with the use of MRI in the diagnosis of MS. This primarily involved differences in the way the scans were obtained, with different radiology departments using different settings on the machine. To bring greater uniformity, the CMSC convened a panel of MRI experts. The result of this meeting was a consensus statement, which was published in February 2006 (*Am J Neuroradiol* 2006; 27:455–61). This document does not change the McDonald criteria for the diagnosis of MS. Rather, it addresses the technical aspect of which MRI sequences

should be performed and how the machine should be set for imaging MS patients. This consensus statement is having an important role in standardizing and improving the quality of MRI imaging on these patients. Though they were only recently published, they have been adopted by several VA radiology departments.

The current diagnostic criteria and MRI recommendations have greatly improved the accuracy of MS diagnosis. These methods perform considerably better than previous crite-

ria and have allowed patients to be correctly diagnosed sooner. These factors have led the methods being widely accepted through the medical community. The quality and clinical usefulness of MRI imaging has also been greatly enhanced. By using criteria like these, the diagnosis of MS can be made more accurately.

James Bowen, MD  
MS Center at Evergreen  
12333 NE 130th Lane, Suite 225  
Kirkland, WA 98034  
(425) 899-5350  
jdbowen@evergreenhealthcare.org

### VA-SIG STEERING COMMITTEE:

**Peggy Coffey, MD**  
Chair  
peggy.coffey@va.gov

**Edward Daly, MD**  
Vice Chair  
edward.daly@va.gov

**Paul Gutierrez, MD**  
Membership  
paul.gutierrez@va.gov

**Sandra Williamson, NP**  
Clinical Care  
sandra.williamson@va.gov

**Deborah Downey NP**  
Editor  
deborah.downey@va.gov

## WEB REVIEW

[www.va.gov/ms](http://www.va.gov/ms)

The VA MS Web site is coordinated through the Centers of Excellence. This Web site is appropriate for both professionals and patients. The site includes articles for diagnosing and treating MS, as well as articles about using MRI and Kurtzke Scales and a definitions article that is a good review of MS terms.

A new article written by Dr. Shin at the Baltimore Center of Excellence focuses on the return of Tysabri and gives very timely information. In the “Life Issue” area, the current article is a review of SSDI that is easy to understand and appropriate for patients. The “Health Problems” area addresses symptom issues: depression, bladder/bowel management, fatigue, immunizations, and fatigue, with new articles appearing fairly often. There are educational offerings by the centers listed on the right side of the page.

The site also contains links to general VA benefits, facilities, applications for VA care, and contact information. At the bottom of each page are additional links to VA forms and other “.gov” Web sites. The search engines are easy to use and there are search engines for both the MS Web site as well as the larger .gov sites.

[www.va.gov/ms](http://www.va.gov/ms)

## EDUCATIONAL OFFERINGS

### Monthly Conference Calls for CME Accreditation

The MS Center of Excellence–East is sponsoring a monthly conference call (repeated on two days each month to accommodate scheduling) lasting an hour and consisting of a presentation of a difficult management issue related to a patient with MS followed by an expert panel discussion of the issue.

These conference calls will be regularly scheduled for the *second Tuesday and Wednesday of each month at 4 pm ET*. Call (800) 767-1750; access code is: 43157.

### DATES

#### OCTOBER 2

#### VA SIG Clinical Care Committee Conference Call – 12:30 EST

“Meds for Bladder Management”

1-800-676-1750; Code #95274

#### OCTOBER 10 & 11

#### Mitchell Wallin, MD, MPH

“Differential Diagnosis of MS vs. Connective Tissue Disease”

Learning Objectives:

- To understand and describe the clinical characteristics of systemic connective tissue disease on the CNS
- To understand and describe the radiologic characteristics of systemic connective tissue disease on the CNS

#### NOVEMBER 8 & 14

#### William Tyor, MD

“Intercurrent infections as a trigger for MS exacerbations”

Learning Objective: To understand and describe how MS can be exacerbated by intercurrent infection.

## MARK YOUR CALENDAR

### Committee Conference Call

#### OCTOBER 2

#### VA SIG Clinical Care Committee Conference Call

12:30 EST

“Meds for Bladder Management”

1-800-676-1750

Code #95274