



**National  
Multiple Sclerosis  
Society**

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# *Clinical Bulletin*

*Information for Health Professionals*

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## **Primary Care in MS**

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**W**hen people with MS visit their primary care clinicians, acute concerns can easily take up the entire visit. For those living with chronic illness, however, good health care relies on comprehensive preventive services as well as acute care. The family physician, internist, or other primary care clinician remains the most appropriate practitioner to meet these and other primary care needs in patients with MS.

### **PREVENTIVE HEALTH CARE**

People with MS should receive the same preventive health interventions as other patients and be educated about their importance. Individuals living with chronic illnesses may be unaware that they are at risk for the same range of medical problems as everyone else. Annual screening should include a medical history, physical examination, and laboratory tests as appropriate. The health maintenance visit may require special screening tests, based on age and other risk factors:

- ◆ Pap testing for women
- ◆ Clinical breast or testicular examination after age 20–25
- ◆ Digital rectal examination after age 40 years, including prostate examination for men
- ◆ Annual mammogram for women after age 40–50 years
- ◆ Fecal occult blood testing and colonoscopy for men and women who are over 50 or have other risk factors
- ◆ Serum screening for dyslipidemia and thyroid abnormalities
- ◆ Bone densitometry (such as dual energy X-ray absorptiometry or DEXA) for anyone at risk for fractures or osteoporosis (particularly those with a family history and/or reduced mobility)

- ◆ Testing for prostate specific antigen (PSA): Although the American Cancer Society recommends that men be tested for PSA after age 30 (45 in African Americans and in men with a family history of prostate cancer), U.S. Preventive Services Task Force guidelines state that existing data are insufficient to recommend for or against universal PSA testing.

Practitioners may worry that pelvic or rectal examinations may be difficult or time-consuming to perform in patients with physical disabilities. Examination tables that lower to the floor can facilitate the process. If the office does not have such equipment, referral can be made to another facility that does. During examinations, the practitioner can also use adaptive equipment or techniques to increase comfort and avoid fatigue. Women with MS who have substantial leg weakness or spasticity, for instance, may better tolerate a pelvic examination if an assistant or lithotomy stirrups help support the legs. Some radiology offices offer seated mammography positioning.

## PROMOTING WELLNESS

**Cardiovascular health:** Cardiovascular disease leads the mortality list among American adults. People with MS should protect their heart health by:

- ◆ Avoiding recreational drugs, excessive alcohol, and tobacco (those who want help quitting smoking can call 1-800-NO-BUTTS)
- ◆ Maintaining a healthy body weight and lipid profile
- ◆ Following the latest USDA guidelines for diet
- ◆ Seeking periodic screening for hypertension, diabetes, and obesity
- ◆ If over age 40, taking a daily baby aspirin, as appropriate
- ◆ Obtaining immediate medical attention for possible symptoms of myocardial infarction or stroke, since MS could alter these symptoms
- ◆ Exercising as appropriate

**Exercise:** A number of studies (McCullough et al., 2008; Romberg et al., 2004; Petajan et al., 1996) have found that regular aerobic conditioning and resistance training, appropriate to an individual's abilities and limitations, benefit persons with MS through improved fitness and muscle strength, reduced fatigue, enhanced mood, and improved quality of life. Exercise also decreases risk of cardiovascular disease, obesity, and osteoporosis in the general population. Specific exercise prescriptions generally include a warm-up period, 20–30 minutes of aerobic training and/or resistance exercises (for instance, on alternating days), and a cool-down period. Chapters of the National MS Society (available by calling 1-800-344-4867) provide referrals to MS specialist clinicians who can recommend a personalized exercise regimen, and/or to appropriate exercise programs in their communities.

**Family wellness:** Family members without MS also need to tend to their own wellness. Caregivers of very disabled individuals may become so involved with MS-related demands that they neglect themselves. On the other end of the spectrum, persons with MS who are able and willing to embrace wellness may become role models who inspire similar achievements among family and friends.

**Immunizations:** The CDC guidelines for adults recommend: (1) tetanus and diphtheria (Td) booster every 10 years; (2) pneumococcal immunization after age 65; (3) varicella immunization if there is no history of clinical varicella illness; (4) annual influenza immunization after age 50; and (5) any other immunizations dictated by individual risk factors. The National MS Society recommends injectable influenza immunizations for all adults with MS, based on studies demonstrating that these injections are safe and effective for preventing influenza infections that might trigger an MS exacerbation. Other vaccinations, such as those for pneumonia, meningitis, typhoid, polio, yellow fever, hepatitis A, human papillomavirus (HPV), and pertussis do not have published studies addressing their safety in MS. Nevertheless, the clinical practice guideline recommends that people with MS who meet the CDC criteria for any particular vaccination, should be given it. CDC criteria may be viewed at [www.cdc.gov/vaccines](http://www.cdc.gov/vaccines).

**Menopause:** In years past, health practitioners routinely recommended hormone replacement therapy (HRT) for postmenopausal women because preliminary, observational data suggested a benefit. More recently, large randomized trials have concluded that HRT increases the risk of heart disease and breast cancer. Although HRT may reduce the risk of osteoporosis, post-menopausal women have treatment options (e.g., alendronate or another non-estrogen medication) to prevent fractures.

**Nutrition:** The USDA's *Dietary Guidelines for Americans, 2005* (<http://www.health.gov/dietaryguidelines>) emphasize a low-fat diet rich in fresh fruits, vegetables, and whole grains. These guidelines can help reduce obesity, which if present can magnify MS symptoms. Persons with MS should also take a daily multivitamin and mineral supplement as well as 1,000 mg of calcium (1,500 mg daily for postmenopausal women and for all adults with impaired mobility) with vitamin D.

**Safety:** Like all adults, those with MS should be counseled to follow good safety practices, including use of seat belts, sun protection, violence prevention, and safe sex. Safety for people with mobility, sensory, or balance problems includes the use of appropriate mobility aids, as well as suitable grab bars and seating equipment in showers and bathtubs. Drivers with visual, cognitive, sensory, and/or coordination problems must attend to important safety issues; a referral for a driver evaluation or adaptive driving aids may be appropriate. Studies indicate that instances of abuse and neglect may be more common in families living with MS than in the general population or in other disabling conditions. Clinicians should notify adult protective services if they suspect abuse of a dependent adult, regardless of the adult's age.

## MANAGING MS-RELATED CONCERNS

**MS exacerbations:** MS exacerbations may initially present to the primary care clinician rather than to the neurologist. All clinicians should therefore be aware of factors that can confuse the clinical picture of potential MS exacerbations:

- ◆ **Hormonal changes** greatly affect MS. Menses may cause fluctuations in MS symptoms. MS typically improves during pregnancy, but commonly flares during the postpartum months.
- ◆ **Pseudoexacerbations** of MS can result from various factors that raise core body temperature: heat and humidity, flu-like reactions to interferons, exercise, or infections. Urinary tract infections are common culprits that can cause fatigue, weakness, or other "MS attack-like"

symptoms without classic dysuria. Unlike actual MS exacerbations, such pseudoexacerbations are self-limited and rarely require intervention beyond cooling measures and treatment of any underlying infection or inflammation.

- ◆ **Complications** of MS can also mimic exacerbations. Pressure neuropathies on peripheral nerves can lead to unexplained sensory or motor deficits. Occult pressure ulcers need to be anticipated, identified, and treated. Undiagnosed hypothyroidism might mimic MS-related fatigue. Primary care physicians can greatly help their patients by anticipating, recognizing and managing such complications.

In contrast to pseudoexacerbations, actual MS exacerbations are defined by new or recurrent MS symptoms that last at least 24 hours and cannot be better explained by another etiology. Exacerbations commonly respond to short-term, high-dose steroids, which are generally given intravenously.

**Other MS complications:** MS is a multifaceted disease that can present myriad challenges. Complications to watch for in primary care include:

- ◆ Bladder and bowel dysfunction, including constipation, UTIs, and episodes of incontinence
- ◆ Cognitive changes, many of which are too subtle to be captured by a brief mental status examination
- ◆ Depression, which is both common in MS and amenable to treatment
- ◆ Dysphagia, which may cause cough, globus sensation, and silent aspiration
- ◆ Gait disorders and falls, which may respond to physical therapy, orthotics, or mobility aids
- ◆ Pain (neuropathic, orthopedic, rheumatologic, or other), which should be thoroughly evaluated and treated
- ◆ Visual deficits ranging from optic neuritis to visual motor abnormalities
- ◆ Progressive ventilatory muscle weakness leading to respiratory complications—which are considered the major cause of morbidity and mortality in individuals with advanced MS

With careful attention to preventive care as well as ongoing disease management, primary care clinicians can make indispensable contributions to the comprehensive care of their patients with MS.

## RECOMMENDED READINGS

Cauley JA, Robbins J, Chen Z, Cummings SR, Jackson RD, LaCroix AZ, et al. Effects of estrogen plus progestin on risk of fracture and bone mineral density: the Women's Health Initiative randomized trial. *JAMA* 2003; 290:1729–1738.

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- U.S. Department of Health and Human Services. *Physical Activity and Health: A Report of the Surgeon General*. Atlanta: Centers for Disease Control and Prevention, 1996.
- U.S. Department of Health and Human Services and U.S. Department of Agriculture. *Dietary Guidelines for Americans, 2005*. <http://www.health.gov/dietaryguidelines/>.

## **PUBLICATIONS FROM THE NATIONAL MS SOCIETY**

### **For Professionals**

(available on the website at [www.nationalmssociety.org/prc](http://www.nationalmssociety.org/prc) or by calling 1-866-MS-TREAT)

- ◆ *Clinical Bulletins*: Brief articles, by MS specialist clinicians, about a range of treatment issues and strategies
- ◆ *Expert Opinion Papers*: Treatment recommendations from the Society's Medical Advisory Board
- ◆ *Talking with Your MS Patients about Difficult Topics*: Two sets of six booklets designed to help clinicians respond to their patient's questions about some of the more difficult and challenging aspects of the disease, including diagnosis, disease progression, elimination problems, sexual dysfunction, depression, and cognitive changes

### **For Your Patients**

(available in the Library section of the website at [www.nationalmssociety.org/library.asp](http://www.nationalmssociety.org/library.asp) or by calling 1-800-FIGHT-MS)

- ◆ *Preventive Care Recommendations for Adults with MS*
- ◆ *Exercise as Part of Everyday Life*
- ◆ *Food for Thought: MS and Nutrition*
- ◆ *Vitamins, Minerals, and Herbs in MS: An Introduction*

## **Books Available from Demos Medical Publishing**

(www.demosmedpub.com)

Ettinger A, Weisbrot D. *The Essential Patient Handbook: Getting the Health Care You Need—From the Doctors Who Know*, 2004.

Holland N, Halper J. *Multiple Sclerosis: A Self-Care Guide to Wellness* (2nd ed), 2005.

Kalb R (ed). *Multiple Sclerosis: A Guide for Families* (2nd ed), 2005.

Kalb R (ed). *Multiple Sclerosis: The Questions You Have; The Answers You Need* (4th ed), 2008.

Kraft G, Catanzaro M. *Living with Multiple Sclerosis: A Wellness Approach* (2nd ed), 2000.

Krupp L. *Fatigue in Multiple Sclerosis: A Guide to Diagnosis and Management*, 2004.

Schapiro R. *Managing the Symptoms of Multiple Sclerosis* (5th ed), 2007.

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