



Pain in Multiple Sclerosis

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Defining and Describing MS Pain

Pain is one of the most common “invisible” symptoms of multiple sclerosis (MS), affecting approximately two-thirds of people with MS over the course of their lives, and approximately half of people with MS at any given time.^{1,2} Despite the high prevalence of pain in MS, less than one-third of patients report receiving treatment to specifically address their pain.² Routine assessment and comprehensive treatment of pain is essential for promoting function and quality of life among people with MS.

Pain in MS can be classified in multiple ways, based on type, duration, and severity. Types of pain include musculoskeletal pain – which involves the bones, muscles, ligaments, and tendons – and neuropathic pain – which involves the nerves and can interfere significantly with the ability to sense temperature, touch, and pressure.² Pain duration can be acute (short-term) or chronic (6 months or longer), the latter of which can lead to disability. Pain intensity is often rated as mild, moderate or severe, varies considerably between individuals, and can fluctuate over time.

Given the wide range of pain experiences, and the different treatments and strategies available for managing different types of pain, it is helpful for people with MS and their providers to discuss pain using descriptive terms. For example, terms such as “dull,” “aching,” “itching,” “burning,” “electric shocks,” “stabbing,” “tightening,” and “pulling,” are all different ways of describing painful sensations that may occur with MS, and can help determine the most appropriate course of treatment.^{3,4}

Pain Intensity and Pain Interference

Keeping track of pain intensity and pain interference is useful for identifying the types of situations and activities that can improve or worsen pain. Pain intensity can be rated on a scale of 0 (no pain) to 10 (worst pain imaginable) and pain interference can be rated on a scale of 0 (doesn’t interfere with functioning at all) to 10 (completely interferes with functioning). The distinction between pain intensity and pain interference is important because some treatments – especially non-pharmacological approaches such as rehabilitation therapies and psychological interventions – are effective for reducing pain interference (i.e., improvements in daily functioning), even if pain intensity does not significantly change.

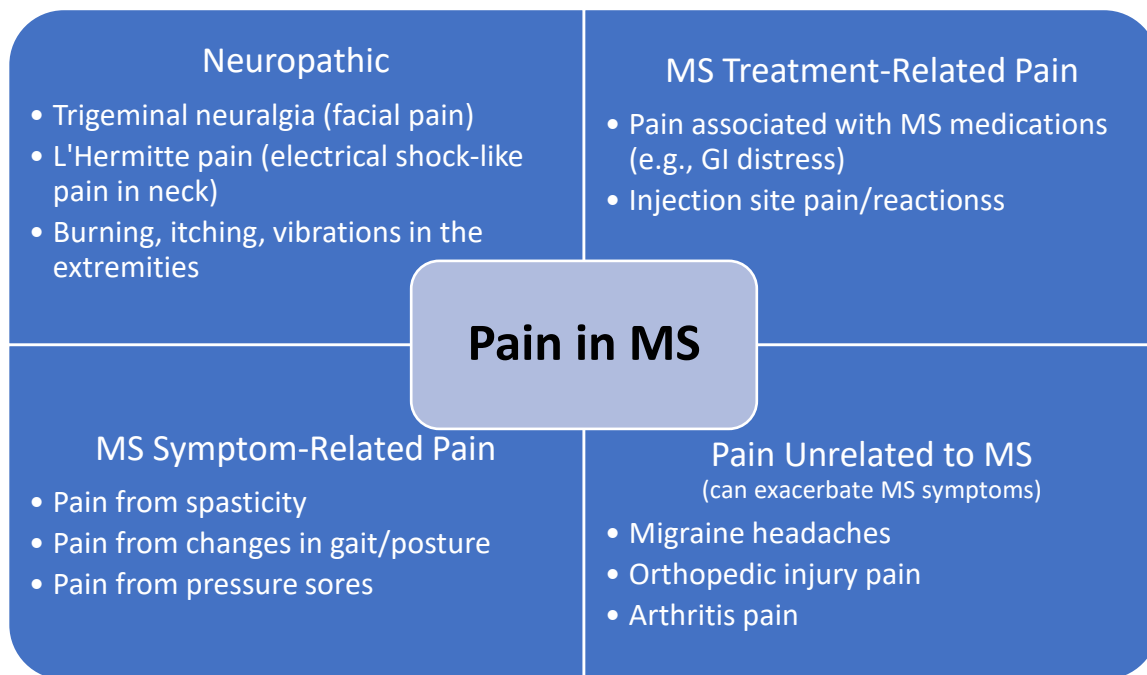
Pain can interfere with daily functioning in a number of ways, and lead to additional problems such as loss of hobbies/enjoyable activities, social isolation, difficulty falling or staying asleep, and mood changes (e.g., new or worsening depression and/or anxiety). Many people with MS also report that their pain interferes with their concentration and memory; however a recent study showed no significant relationship between pain intensity and performance on tests of memory and attention.⁵ These results suggest that although chronic pain might not directly cause problems with attention or memory, it can lead to depression, which does affect

how people perceive themselves and their abilities.⁶ Thus, early diagnosis and effective pain management strategies has import implications for physical, cognitive, and emotional functioning in MS.⁷

Managing MS Pain

Pain management in MS includes non-pharmacologic and pharmacologic approaches.³ Non-pharmacologic methods include: (1) rehabilitation interventions such as physical and occupational therapy (e.g., exercises focused on strength, stability, and endurance); (2) psychological interventions such as cognitive behavioral therapy (CBT), acceptance and commitment therapy (ACT), mindfulness, and relaxation training; and (3) complimentary and integrative approaches such as yoga, Tai Chi, and acupuncture.^{8,9} Pharmacologic approaches differ according to the type of pain.⁷ For example, botulinum neurotoxin can be helpful for managing spasticity or painful muscle spasms. Some antidepressant and antiseizure medications have been shown to be effective for neuropathic pain. A consultation with a neuropsychiatrist – a psychiatrist who specializes in neurologic disorders like MS – can help determine if and which medications are appropriate, given a patient’s individual medical history and other factors such as current medications and mental health history. There has also been an increased interest in the use of cannabis for pain in MS. A recent systematic review¹⁰ suggested that cannabis, when compared to a placebo, showed some benefits for improving spasticity; however, more studies are warranted to determine which types and dosages of cannabis are most effective.^{4,10} Long-term side effects of cannabis use in adults with MS (e.g., cognitive effects) remain under investigation.

Given that any single therapy by itself is not usually sufficient for managing MS pain, a referral to a comprehensive, multi-disciplinary pain management program or a physical medicine and rehabilitation program is recommended. These programs offer many of the approaches described above, and work with patients to coordinate their care to determine the optimal combination of therapies and strategies.⁷



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