

DEPRESSION AND PAIN IN MULTIPLE SCLEROSIS

Prof. Vanja Bašić Kes

Department of Neurology, University hospital Sestre milosrdnice, Zagreb, Croatia

Multiple sclerosis (MS) is an inflammatory, demyelinating disease of the central nervous system. MS most commonly afflicts people aged 18-50 years, but any age group can be affected. The disease can present in different forms, such as primary progressive, relapsing remitting, relapsing progressive and secondary progressive types. MS may present in various forms. Some patients have a predominance of cognitive changes, while others present with prominent ataxia, hemiparesis or paraparesis, depression or visual symptoms. Bipolar disorder and frank dementia may appear late in the disease course, but sometimes are found at the time of initial diagnosis. Over a variable period, usually measured in years, the patient becomes increasingly handicapped, with an asymmetric paraparesis and obvious signs of corticospinal tract disease, sensory and cerebellar ataxia, urinary incontinence, optic atrophy, nystagmus, dysarthria and various sensory signs including signs of paresthesias and dysesthesias.

Several studies have reported high rates of depression in multiple sclerosis (MS) with a lifetime prevalence of 50% and an annual prevalence of 20% not uncommon. Concern about the potential of new drug treatments to exacerbate or precipitate depression in MS has led to increased interest in the relation between MS and depression

Although pain is not considered a typical symptom of MS, more than 50% of patients present with pain syndromes. Most of them do not receive appropriate treatments, as clinicians are more oriented towards controlling the immuno-pathogenic process of the disease than coping with symptomatic consequences of the lesion.

The most common pain syndromes experienced by people with MS include:

headache (seen more in MS than the general population)
continuous burning pain in the extremities
back pain
painful tonic spasms (a cramping, pulling pain)

The association between headache and MS is unclear, but has been reported to occur in association with exacerbations. Headache may also be related to optic neuritis, tension, muscle spasm at the back of the neck, or even to fatigue and depression. Treatment of the headache is determined by the nature of its origin.

Experts usually describe pain caused by MS as either musculoskeletal pain, paroxysmal pain or chronic neurogenic pain.

Musculoskeletal pain can be due to muscular weakness, spasticity and imbalance. It is most often seen in the hips, legs and arms and particularly when muscles, tendons and ligaments remain immobile for some time. Back pain may occur due to improper seating or incorrect posture while walking. Contractures associated with weakness and spasticity can be painful. Muscular spasms or cramps (called flexor spasms) can be severe and discomfiting. Leg spasms, for example, often occur during sleep

Paroxysmal pains are seen in 5-10% of people with MS. The most characteristic is the facial pain of trigeminal neuralgia, which usually responds to carbamazepine. Lhermitte's sign is a stabbing, electric-shock-like sensation running from the back of the head down the spine brought on by bending the neck forward. Medication is of little use because this pain is instantaneous and brief.

Neurogenic pain is the most common and distressing of the pain syndromes in MS. This pain is described as constant, boring, burning or tingling intensely. It often occurs in the legs.

Paraesthesiatypesinclude pins and needles, tingling, shivering, burning pains, feelings of pressure, and areas of skin with heightened sensitivity to touch. The pains associated with these can be aching, throbbing, stabbing, shooting, gnawing, tingling, tightness and numbness. Dysesthesiatypesinclude burning, aching or girdling around the body. These are neurologic in origin and are sometimes treated with antidepressants.

Optic Neuritis (ON) is a common first symptom of MS. Pain commonly occurs or is made worse with eye movement. The pain with ON usually resolves in 7-10 days.

Treatment of pain in MS

Exercise and physical therapy may help to decrease spasticity and soreness of muscles. Regular stretching exercises can help flexor spasms. Relaxation techniques such as progressive relaxation, meditation and deep breathing can contribute to the management of chronic pain.

Other techniques which may help pain include massage, ultrasound, chiropractic treatments, hydrotherapy, acupuncture, transcutaneous nerve stimulation (TENS), moist heat and ice.

Pain from damage to the nerves in the central nervous system in MS is normally not relieved by the usual analgesics (such as aspirin). Drugs that treat seizures (for example carbamazepine) and antidepressants (such as amitriptyline) are often effective in these cases. Treatment for spasms can include baclofen, tizanidine and ibuprofen.

Conclusion

Pain in MS is a hidden symptom, but one which can be persistent. Pain can cause long-term distress and impact severely on quality of life. Self-help may play an important role in pain con-

trol; people who stay active and maintain positive attitudes seem more able to reduce the impact of pain on their quality of life.