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Living with MS alongside age-related health issues

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This article was first published in *MS in focus* magazine in January 2015.

MS affects more than 2.3 million people around the world, and many people with MS also have other health conditions, such as high blood pressure or asthma. These co-existing conditions are called "comorbidities". Comorbidities differ from secondary conditions and complications, which are physical and mental problems that arise from MS. For example, osteoporosis that occurs due to reduced mobility is a secondary condition. Urinary tract infections due to a neurogenic bladder – problems with the nerves in the body that control how the bladder stores or empties urine – are complications.

It is important to know how these conditions differ, since the approaches to treating them are not the same. If a comorbid condition makes fatigue worse, the health care team would treat the comorbidity. If a complication such as a urinary tract infection causes increased symptoms, the health care team would treat the complication and the neurogenic bladder. This article will focus on comorbidities.

Common comorbidities in ageing people with MS

Psychiatric comorbidities are common in MS throughout the disease course. Over a lifetime, half of people with MS will develop depression; about one in three people will develop anxiety; bipolar disorder, though a lot less common than depression and anxiety, affects about one in twenty people with MS.

Physical comorbidities are also common in MS. At the time of MS diagnosis, when most people are young, the risk of conditions like diabetes and high blood pressure is low. With increasing age, co-existing conditions are more common. At older ages, the conditions that are most common in MS are those that are the most common in the general population. High blood pressure affects more than 45 percent of people with MS over 60 years old. High cholesterol and chronic lung diseases, such as asthma or chronic bronchitis, affect more than 20 percent of people with MS over 60. Diabetes and heart disease affect more than 15 percent, while autoimmune thyroid disease affects up to 10 percent of people with MS. Most of these conditions affect people with MS about as often as they affect people who do not have MS.

Impact of comorbidities

Comorbidities affect MS in many different ways. It has been reported that vascular comorbidities, including high blood pressure, high cholesterol, diabetes and heart disease appear to be common.

In one study, participants with vascular comorbidities had faster declines in walking ability than those who did not. About half of people without comorbidities needed a cane to walk within 18 years of having their first symptoms of MS. But as many as half of people with comorbidities needed a cane to walk within 12 years of having their first symptoms. In another study, people with MS who had higher total cholesterol levels had more disability after two years than those with lower levels. Higher cholesterol levels were also associated with greater shrinkage of the brain.

People with MS who are depressed or anxious are less likely to take their disease-modifying therapies as prescribed. Quality of life is lower in people with MS than in other people, and as the number of comorbidities increases, quality of life decreases. This is the case in people with MS who have comorbid depression and anxiety, while physical comorbidities also affect quality of life.

In a nation-wide Canadian study, quality of life was lower in people with MS who also had arthritis, high blood pressure, chronic fatigue syndrome or depression. Arthritis, high blood pressure and chronic lung disease merit clinical attention as they increase in frequency with age. Depression is a concern at all ages. It is not yet known whether treating a person's comorbidities improves quality of life. The effect of comorbidity on life expectancy in MS is poorly understood.

Management considerations

As people with MS get older and the disease progresses, symptom management is more important. Little is known about the impact of comorbidity on the management of MS. Generally, adults with multiple chronic conditions report many problems with medications. Coordinating multiple medications at different times is difficult, and taking more than one medication may be costly. These problems can make it hard to take medications as prescribed. This, obviously, reduces the benefits of the medications.

The presence of comorbidity in MS may pose management challenges. A person with MS and comorbidity may present with more than one clinical problem at the same time; or, a person may present with one problem due to several factors. For example, fatigue may be due to MS or another condition, such as a sleep disorder or thyroid disease. Symptoms that often occur with ageing can also be a challenge. For example, poor vision and memory are common symptoms in MS, but these symptoms also affect people without MS as they get older. Sometimes these symptoms simply reflect ageing. Sometimes these symptoms are due to comorbidities. Worsening vision in an older person with MS could be due to cataracts in some cases. Therefore, it is critical to identify the influence of alternative causes other than MS for worsening symptoms. This often requires coordination of care by different members of the health care team.

It is important that people with MS continue to be followed by their primary care or family physician, since many ageing-related issues are not associated with MS and are better evaluated and managed by a general practitioner rather than by a neurologist.

MS treatment and comorbidities

Many treatments exist for managing the chronic symptoms of MS. However, clinical trials of these treatments often leave out people with comorbidities for safety reasons. Therefore, sometimes it is not known if

these treatments are as safe, effective or well-tolerated in people with comorbidities. In a trial of a fatigue management programme, participants with MS and diabetes improved more slowly than other participants. Treatments and goals may need to be changed when comorbidity is present.

Treatments used for MS may affect the risk of comorbidities. For example, corticosteroids used to treat relapses may worsen the control of diabetes. As the number of comorbidities increases, it is more likely that a person with MS will be taking multiple medications at the same time. Use of multiple medications increases the risk of side effects and drug interactions. Some medications may cause blood pressure to get too low causing fainting or dizziness. Reaction times may be slowed. Balance may be impaired as well, leading to falls.

Conclusion

Comorbidity is common in MS and increases in frequency with age. Comorbidity affects disability progression, quality of life and other outcomes. Also, it may affect the usefulness of symptomatic treatments, while it increases the chances that multiple medications will be used together. Therefore, any changes in management proposed for a person with MS should be considered in the context of their whole treatment regimen.