

New study shows benefits of current treatments for people with advanced MS

11th December, 2016



**Contrary to the notion that current treatments only benefit early stage MS, new research has shown that taking treatments that modify the immune system can improve the disease course even in people with advanced MS.**

Advanced MS affects people in different ways, and is very difficult to predict. A group of international scientists led by Australian researcher Nathaniel Lizak, of the University of Melbourne, has been using a large database of MS patients to investigate advanced MS. As the famous Sherlock Holmes once

said 'it is a capital mistake to theorise before one has data'. The database called MSBase, is run from Australia and now follows close to 40,000 people with MS from over 72 different countries, making it the largest MS dataset in the world.

Published in the *Journal of Neurology, Neurosurgery and Psychiatry*, the study looked at people with MS who had more advanced scores on the EDSS scale. EDSS stands for Expanded Disability Status Scale, and it is a method of measuring disability in MS. They identified 3,415 patients which were categorised as having advanced MS and tracked their disease progression using the clinical data. The researchers found that a person's early disease course did not predict their rate of progression once they had reached moderately advanced MS.

They also tested the effect of different treatments on the rate of progression in people with advanced MS. Here they found that with the current arsenal of treatments, there are opportunities to modify the disease course even at later stages of MS. They demonstrated that the use of current treatments does have benefits, and delays the increase in EDSS scores of people with advanced MS.

This is somewhat surprising, as it is often thought that treatments can only benefit people in the early stages of MS. It is thought that MS has different phases, and during the early phase, the physical effects of MS are mainly due to inflammation, whereas in the later phases, they are due to the loss of nerve cells in the brain and spinal cord. Treatments used for MS generally target the inflammatory stage, which is why they can be effective early in the disease, when inflammation is most important. This research suggests that inflammation also plays a role in more advanced stages of MS.

It is important to note that this study didn't look at individual medications but rather the effect of modulating the immune system. Each immunomodulatory treatment works in a slightly different manner and given the hugely variable nature of MS no one medication is likely to suit all patients. It is important that you discuss your medication with your treating physician.

One great advantage of MSBase is the ability to look at the long-term effects of treatments and see what impact they are having over many years in real-life situations.