A shorter treatment gap is better when switching from natalizumab (Tysabri) to fingolimod (Gilenya)

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A clinical trial published last week in the medical journal <u>Neurology</u> has shown that a reduced time period between treatments when switching from natalizumab (Tysabri) to fingolimod (Gilenya) is beneficial.

Natalizumab can be an effective treatment for many people with relapsing remitting MS, but can be associated with the development of progressive multifocal leukoencephalopathy (PML), a very rare but potentially life threatening side effect caused by an opportunistic brain infection of JC virus (JCV). There are a number of factors associated with a lower likelihood of PML, including the amount of anti-JCV antibodies in the blood and length of time on previous immunosuppressants (for more information on these factors please <u>see here</u>). Depending on this risk factors, patients and their doctors may decide to switch from natalizumab to another therapy to reduce the risk of developing PML.

When changing from one disease modifying therapy to another there is usually a period without treatment, known as a washout period. The washout period allows the body to clear one treatment before the next one is started. This is important since the presence of multiple immunosuppressive treatments in the body at the same time may affect the immune system's ability to function, in particular its capacity to find and recognise any invading pathogens. However, when treatment with natalizumab is stopped people can often have a resumption of their MS symptoms such as relapses and lesion development.

Therefore, identifying the optimal washout period between natalizumab and other treatments is of vital interest to neurologists to find a balance between allowing the body to clear natalizumab and keeping MS symptoms under control.

An earlier study conducted via the MSBase registry, which contains clinical details from 29,000 people with MS from around the world, indicated that better outcomes were seen when the washout period for switching from natalizumab infusions to the tablet-based treatment fingolimod, was less than two months (read an earlier article on this study here)

This has now been confirmed in a gold-standard clinical trial conducted by an international research team.

This clinical trial compared people who changed from natalizumab to fingolimod. The trial compared 112 people who made the switch with each patient being randomly assigned to either 8, 12 or 16 weeks between the treatments. The trial found that shorter washout periods were better at reducing breakthrough symptoms of MS.

Those people who had 8 or 12 week washout periods had fewer active lesions during the washout period and for the first eight weeks on fingolimod when compared to those with the 16 week washout (results adjusted for observation time). When comparing active lesions during the washout period only, the longer the washout period the higher the lesion count, with the 8 week washout period showing the best outcome. More patients in the 8 and 12 week washout groups did not have a relapse over the course of the study when compared with those in the 16 week group.

Based on their data, the trialists recommend a washout period between 8 and 12 weeks when switching people with MS from natalizumab to fingolimod.

Article courtesy of MS Research Australia:

MS Research Australia does not endorse any specific treatment for people with MS and recommends that treatment decisions, including switching from one treatment to another are made in conjunction with a neurologist.