## NEW DRUGS SHOULD NOT BE USED AS FIRST LINE THERAPY IN MULTIPLE SCLEROSIS Joab Chapman

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Multiple sclerosis is a neurological disease manifesting by transient neurological deficits (relapses) and potential long term progressive disability (progression). Multiple sclerosis is a chronic disease and patients are expected to take medication for the rest of their lives in order to avoid seizures and the deterioration of the disease. Each clinical relapse of the disease may be reversible (remission) but can also leave permanent damage.

When initially dealing with a patient who has been diagnosed with multiple sclerosis, the process of finding suitable medication can be lengthy and complex, since there is no indication by which one can gauge in advance which one of the medications will be the most efficient for each patient. Over time efficacy is assessed by the appearance of relapses, progression of disability and lesion activity measured by MRI. The success of medications is also judged by the degree side effects that may damage quality of life.

In medicine, like in any field, there are 'trends' that are expressed in innovations of medications or treatments, but it is important to understand that not every innovation or trend is necessarily good and appropriate for each patient. Most of the medications currently used for the treatment of multiple sclerosis have several years of experience behind them. The immunomodulatory treatments have been proven as efficient for over two decades and are not generally immunosuppressive. In contrast, the new oral and intravenous medications that have entered the market lately suppress the immune system, with potentially increased risk of infection in the short term and malignancy in the long run. It should be noted that the use of medications of this kind, which include steroids and medications that suppress the immune system were used regularly 20 years ago despite the fact that their efficiency was dubious. The appearance of medications which modulate the immune system rather than suppress it (Interferons and glateramer acetate) was a very important and significant step forward. There is currently a trend to return to medications that suppress the immune system and it will take a number of years till we know how efficient this approach really is. In relation to this, it is important to point out that multiple sclerosis is a disease whose natural development leads to deterioration. With a high percentage of patients stabilizing with the immune-modulatory therapies there is a significant dilemma regarding the viability of initiating therapy or switching to a new medication. Considerations such as convenience of oral versus injectable therapy do not seem to outweigh potential side effects and lack of long term efficacy data. Certainly innovation for its own sake cannot have a significant weight from this perspective.

Initiating or changing treatment should obviously be considered if the patient reports unbearable side effects, if the medication is no longer efficient in avoiding the activity of the disease, if a patient wants to become pregnant or if it has been proven, beyond a shadow of a doubt that there is definitely a more effective treatment for the patient. In any case, the decision needs to be based on an objective consideration and be supported in the examination findings rather than due to the fact that there is a new medication on the market.