

NATIONAL MULTIPLE SCLEROSIS SOCIETY
MS LEARN ONLINE INTERNET PROGRAM
Managing MS with Disease Modifying Agents – Part II

>>Welcome, and thank you for joining the National Multiple Sclerosis Society's MS Learn On Line Internet program. I am Rick Turner, your host and medical correspondent. The management of multiple sclerosis has been substantially advanced by the availability of the disease modifying agents. Today in our second of four web casts we will continue our discussion on these agents so that you can better understand what is available and the options you have. With us once again is Dr. Fred D. Lublin. Dr. Lublin is a Saunders Family Professor of Neurology at Corinne Goldsmith Dickinson Center for Multiple Sclerosis at Mt. Sinai Medical Center in New York.

Welcome back, Dr. Lublin.

>>Dr. Lublin: Thank you, Rick, nice to be back.

>>Rick Turner: When we ended our last interview we had been discussing interferons, so today let's begin with another treatment option, glatiramer acetate or Copaxone. Give us some specifics on what glatiramer acetate is.

>>Dr. Lublin: Glatiramer acetate is a mixture of four amino acids mixed at very specific ratios almost like one would use a recipe from a cookbook. These amino acids join together in what is called a polymer. Interestingly enough, these specific amino acids and this specific polymer turns out to have immunomodulatory activity that is relatively specific for multiple sclerosis.

>>Rick Turner: How is the action of glatiramer acetate different from interferons which you described in our prior interview?

>>Dr. Lublin: Glatiramer acetate works a little more specifically as best we know in that it has an effect on the generation of the immune response altering it so that the immune response becomes what is called regulatory or suppressive. There is generation of these regulatory cells that travel into the nervous system and instead of damaging the nervous system they turn off the immune response that causes the damage. It is a different mechanism of action than what we saw with interferon.

>>Rick Turner: Let me ask you the same question regarding glatiramer acetate as I did about the interferons. Have we learned anything new since the original clinical trials and have the benefits from the original trials held true?

>>Dr. Lublin: We have learned also that glatiramer acetate may play a role in enhancing repair of the nervous system.

>>Rick Turner: Now we have a series of questions we would like you to address doctor. We received an E-mail from a participant asking this question: I was diagnosed with relapsing-remitting MS in June of 2003 and have been taking Copaxone since July of 2003. I was first prescribed to take Copaxone three times per week and then directed to take it daily by another doctor just a few weeks into that therapy. I have not been consistent, however, in administering the Copaxone daily. I have had no change in my MRI during the past two years and except for occasional memory problems and fatigue I am fine. So, do we know the long-term effects of taking MS medication part time vs. full time?

>>Dr. Lublin: No, and there is no evidence that Copaxone should be given anything less than daily. So I do not know why the individual was taking it three times a week. There is a different medication, one of the interferons is given three times a week, but Copaxone is a daily medication and as best we know there are no adverse long-term effects at least none that we are aware of as of this date. In fact, and I wanted to comment on this earlier, of all the medications we have been discussing, the interferons and Copaxone, we have not run into any new problems that we were not aware of after their initial testing.

>>Rick Turner: Certainly good news. Another question comes from Linda. She asks: I have secondary progressive MS. Do you know if Copaxone has helped with this form of multiple sclerosis?

>>Dr. Lublin: Copaxone has not been tested in secondary progressive MS so we have no direct data to advise us on its use in that form of MS.

>>Rick Turner: Tina in Washington has this question: I have been diagnosed with MS for 28 years and I am still walking. I do not have relapsing-remitting MS. (Does not say exactly what she does have). Is it really necessary for a person in that situation to take one of the ABCR drugs? Doctor, what would you say to Tina?

>>Dr. Lublin: I would say she needs to discuss that with her neurologist. The medications that we use on individuals whose MS is active. Ongoing activity either

by clinical problems or changes on the MRI scan, so I cannot address Tina's problems specifically but she really should discuss it with her neurologist.

>>Rick Turner: Understood. A general question from Jean regarding all of the disease modifying medications: How do I know if it is doing anything?

>>Dr. Lublin: Jean has asked a very important question for which we do not have a very good answer. We know these drugs work from the clinical trials where they are compared to individuals who are receiving a placebo, that is, non active drug. Once someone starts treatment with one of these agents, we do not know how they would have done had they not been on the agent. So, we really have no way of knowing whether it is working for them and MS is such a variable disease that it is very hard to predict. If someone is doing poorly, many attacks after starting the medication or going into a progressive decline, we can make the assumption it is probably not working for them. But absent that rather severe change, it is hard to know whether it is working. We take it as an item of faith based on our clinical trials.

>>Rick Turner: Over the past two interviews we have been primarily discussing the immunomodulatory treatments, now let's talk about a different type of treatment, an immunosuppressant treatment called Novantrone. First of all, what is Novantrone?

>>Dr. Lublin: Novantrone or mitoxantrone, which is its generic name, is a chemotherapeutic agent. It was originally approved for treatment of certain types of cancer. It is an immunosuppressant so it broadly suppresses the immune system and it is a rather potent medication.

>>Rick Turner: Who is it being used to treat?

>>Dr. Lublin: It is being used to treat patients with what is called worsening MS. That is, individuals with a relapsing form of MS, either relapsing-remitting or more usually secondary progressive MS, whose courses become rapidly worse. It is usually used after they have been treated with one of the other immunomodulating agents that we have been talking about and have not responded adequately.

>>Rick Turner: What are the benefits of Novantrone?

>>Dr. Lublin: The benefits from the clinical trials of Novantrone suggest that it does slow the progression of multiple sclerosis in individuals in this category of worsening MS.

>>Rick Turner: On the flip side, what are the risks?

>>Dr. Lublin: There are several risks. Immunosuppressants have the increased risk of infections, and specific with mitoxantrone if you take it for an extended period, that is, as it is standardly dosed, after 33 months there is a risk of damage to the heart muscle and heart failure. There is also a small risk of leukemia induction with mitoxantrone.

>>Rick Turner: Dr. it is no secret that people with progressive courses of MS have very few treatment choices, in fact, do people with a primary progressive course of MS have any choices amongst the disease modifying agents we have been discussing so far?

>>Dr. Lublin: There is no therapy that has been shown to be effective in primary progressive multiple sclerosis. Therefore, the official answer is no, there is not. The reality is that it is my belief that primary progressive MS is not all that different from the other forms of multiple sclerosis and it would be worth trying the other disease modifying agents, but I must caution that there is no clinical trial data to support that and no agents that are actually approved or labeled for treatment of primary progressive MS.

>>Rick Turner: In preparation for this interview we received many E-mails from people with primary progressive MS who are very discouraged, understandably so. Is there any research happening that they could maybe find a glimmer of hope in?

>>Dr. Lublin: Yes. There are some ongoing studies in primary progressive MS with some new agents that hopefully will provide good results but we have to wait until the trials are completed.

>>Rick Turner: Well, Dr. Fred Lublin, thanks again very much for helping us to better understand the disease modifying agents available today. We appreciate it.

>>**Rick Turner:** The National MS Society is proud to be a source of information for you about multiple sclerosis. Our comments are based on professional advice, published experience, and expert opinion, but do not represent individual therapeutic recommendation or prescription. For specific information and advice

consult a qualified physician. If you have a question that was not addressed, please E-mail us at mslearnonline@nmss.org. If you would like more information on multiple sclerosis, click on the resources link on your screen or call the chapter nearest you for an answer to your question. You can reach your chapter by calling 1-800-FIGHTMS. That is 1-800-344-4867. You may also want to check the National MS Society's web site where you will find more information about today's topic and a menu of other web casts available to participate in.

Funding for this program was provided as an unrestricted educational grant from these National MS Society chapters

Please join us for the next web cast when we will discuss some of the side effects with the treating agents.

For the National Multiple Sclerosis Society I am Rick Turner wishing you health and happiness.