



**MS Learn Online
Feature Presentation
Can Progressive MS Be Treated?
Paul O'Connor, MD**

Tom>> Hi I'm Tom Kimball

Tracey>> And I'm Tracey Kimball, welcome to MS Learn Online. In the first program in our series on progressive MS, Dr. Paul O'Connor spoke with Rick Somers about the different types of progressive MS and the role that MRI's play in its diagnosis.

Tom>> In this feature presentation, Dr. O'Connor talks about treatment options for people with progressive forms of MS.

>>Paul O'Connor: Unfortunately, the options for treatment with these types of MS, primary and secondary-progressive, are far more limited than for those with relapsing-remitting disease. If one has relapses with one's primary or secondary-progressive disease, treatment with one of the conventional disease-modifying therapies, such as an interferon or glatiramer acetate, can be contemplated. Even perhaps if relapses are particularly severe with poor recovery, consideration of a drug like natalizumab.

If one has progressive disease in the absence of relapses, there are no drugs that have shown real benefit in treating this type of the illness. And this is the greatest therapeutic challenge to the MS community right now. We badly need drugs that work for progressive MS.

>>**Rick Somers:** And this is, again, statistically a much smaller amount of patients, but people who are severely afflicted.

>>**Paul O'Connor:** Well, it's smaller than the relapsing-remitting, but remember when a patient begins with relapsing-remitting MS, and that's 85% of the total, at the beginning most of those patients eventually transition into secondary-progressive MS. So that at any given moment, about 40% of all patients have either primary or secondary disease.

>>**Rick Somers:** Thanks for clarifying that. What's in the pipeline? We're spending a lot of money, a lot of time, a lot of energy on research and development. What do you see down the road?

>>**Paul O'Connor:** So, I see there is a significant effort being made to develop new drugs for progressive MS. There are several agents that are being looked at in both primary and secondary disease. And we have high hopes for these ongoing and planned clinical trials. However, we have to be realistic and recognize that to date, every trial performed in progressive disease that looked at patients who are not also having relapses at the same time, so I'll call it pure progressive disease. Every trial of a drug in pure progressive disease has so far failed. So, this is a great therapeutic challenge.

I'd like to summarize by saying we know now to prevent relapses, we don't yet know how to prevent pure progressive disease.

>>**Rick Somers:** Let me hold your feet to the fire and ask you about Tysabri and Novantrone.

>>**Paul O'Connor:** So, natalizumab, or Tysabri, was developed exclusively in patients who had relapsing-remitting type MS. Has not been trialed in patients with primary or secondary-progressive disease. A small number of patients who were in the Phase II trial of

the agent had secondary progressive disease, but the numbers were too small to conclude anything.

And in the pivotal Phase III trials of this drug, including what is called the AFFIRM and CENTINEL trials, the patients were those who had relapsing-remitting.

>>**Rick Somers:** Okay.

>>**Paul O'Connor:** I'm very curious as to whether the drug, natalizumab, would be effective in treating progressive disease. But those clinical trials have not been done.

Now, you also asked about mitoxantrone, or Novantrone. If you look at the people in the big trial of that agent, which was called the MIMS trial, most of the patients had a significant degree of relapse to their disease. And so it's not surprising that the drug as an anti-inflammatory and immunosuppressive agent, was able to suppress disease in those patients who tended to have relapsing elements to their progressive disease. That's why I've been careful to say that there are no drugs that work for patients with purely progressive disease, that I know of.

>>**Rick Somers:** Treating patients, and you're in a clinic in Toronto, is really a team approach. We have our neurologists, we have our psychologists, we have our physical therapists. What is the typical course of the teamwork? If we were to flip through your rolodex, who are we sending people to?

>>**Paul O'Connor:** Right. So, modern MS care is necessarily multidisciplinary, and the players, if you will, in this teamwork include physicians, such as neurologists, psychiatrists, physiatrists, who are rehabilitation specialists; urologists, to deal with urinary dysfunction. We also use other paramedical personnel, nurses are a key element in our team. Nurse practitioners are a more modern evolution of the

role of a nurse in caring for MS patients. Physiotherapists and occupational therapists are also helpful.

Other specialists that we call on include psychologists, particularly for a neuropsychological assessment. Sometimes we call on massage therapists, occasionally chiropractors. Sometimes pain specialists, who may be physicians, or members of other disciplines. So, there are a long list of individuals that are involved in the care of our MS patients.

>>**Rick Somers:** Are you personally also open to nontraditional methods? Acupuncture?

>>**Paul O'Connor:** Sure. Alternative and complementary medicine practitioners are also a big part of the kinds of people that our patients assess. And in relation to what is done by these practitioners, I tell the patient that it's a free country and they're able to access any caregiver that they wish.

>>**Rick Somers:** Absolutely. I mean, I'm a firm believer, from a therapeutic standpoint, of running anything by your primary care physician, just not making choices happenstance. And that the neurologist, in your case, you, should be certainly informed as to any choices the patient may be making along the way.

Let me ask you this, in closing. Glass half full, glass half empty, I prefer the half full approach, looking for some upbeat news about somebody who is dealing with, or a family member who is dealing with somebody who is suffering from progressive MS.

>>**Paul O'Connor:** Well, I would say that there are more drugs in clinical trial now than has ever been the case in the past. So, there is more work being done in this area than ever before. So, that's encouraging.

It's also encouraging that our understanding of the basic biology and pathology of this disease has improved greatly in the last few years. So, that will allow us to have better ideas regarding the generation of new ideas for treatment. So, that's another positive.

And I think our awareness of the need to develop new treatments for progressive MS has also gone up significantly in the last few years. So, we have a situation where there is a need, there is a greater understanding, there is more effort being put into this than ever before. And I think it's only a matter of time until we actually crack this difficult nut and come up with really effective therapies for progressive MS.

>>**Rick Somers:** Do you love what you do?

>>**Paul O'Connor:** Yes, I do.

>>**Rick Somers:** It shows, and you've been doing it with the MS population for about two decades now, right?

>>**Paul O'Connor:** That's right.

>>**Rick Somers:** Great. Well, we're so glad that you had a few minutes out of your busy day to spend with us and give us some insights on your perspective on MS in wiping it off our planet.

>>**Paul O'Connor:** Great. I'd love to put myself out of a job.

>>**Rick Somers:** Okay, good. Dr. Paul O'Connor. Thanks.

Tom>> When I heard Rick say that he prefers looking at the glass as being half-full, I was reminded that that's your philosophy, as well.

Tracey>> That's right! I also appreciated Dr. O'Connor's comments about taking a multi-disciplinary approach in treating MS.

Tom>> It's probably even more important for those people with fewer treatment options. Thanks to Dr. Paul O'Connor and Rick Somers for a fascinating discussion about progressive MS.

Tracey>> And thank you for joining us. We hope to see you back again soon.