

Preface

I was diagnosed with secondary progressive multiple sclerosis (MS) in 1994 at the Queen's Medical Centre in Nottingham. At that time, I was told that there was no treatment available apart from steroids. After being diagnosed, I joined the MS society of Great Britain and Northern Ireland. I became a member of its Research Network, when it was formed with the aim to actively involve people affected by MS in all aspects of the Society's research programme and the communication of research results.

Through the Research Network, I have been involved in reviewing grant applications and as a 'research buddy' to researchers in the field. It is through such scheme that I along with two other network members (also affected by MS) were assigned to Dr Gran's research project investigating the role of Toll-like receptors in the modulation of human regulatory T cells. As a consequence of my involvement in this project, I was asked by Dr Gran to talk on "What people with multiple sclerosis would like from Immunology" at the 2-day conference held in Nottingham in October 2010 entitled 'Multiple Sclerosis Immunology: A foundation for current and future treatments', on which this book is based.

The conference brought together researchers and clinical neurologists from all over the world and gave all those who attended a chance to see where the field of MS research stands and where it is heading. It is an exciting time in MS research as many new treatments, mostly immunotherapies, have either been approved or are in the pipeline. Progress is also being made into understanding how the immune system functions in MS and with greater understanding come new potential treatment targets. A continued dialogue between basic and clinical scientists ensures that translation from bench to treatment is more likely to be effective.

People with MS would obviously ultimately like a cure to be found for this debilitating condition, but most would settle for keeping the disease where it is, stopping its progression. A diagnosis of MS brings with it fear and uncertainty; you never know what symptom will hit you next, how long it will last or if indeed it will resolve. Present disease-modifying treatments reduce the number of relapses and may slow progression. I was very interested that trials on alemtuzumab showed an improvement in disability. Unfortunately, the side effects of the treatment are more severe than those of current treatments. With new treatments come new dilemmas for both

patients and neurologists in weighing up the pros and cons. Apart from the work on alemtuzumab presented by Dr Coles, I found the presentations by Prof Yamamura, the keynote speaker, and Prof Constantinescu, Head of Academic Neurology in Nottingham, particularly interesting. The first was a fascinating talk on the potential role of gut flora and the increased incidence of MS in Japan. The second was about the frequent association of MS with other autoimmune conditions.

I recently completed a master's degree in parasitology and studied how helminths produce excretory/secretory molecules, which modulate the immune system in the host and are being investigated as potential treatments in various autoimmune conditions. Recruitment has just started in Nottingham for a clinical trial, in which the immunomodulatory effects of the hookworm *Necator americanus* will be tested for the treatment of MS.

Overall, I feel that what immunology can do for people with MS is to give them hope for the future, that the condition can be managed and the slide into disability staved off indefinitely. I find it very encouraging that so much work is being done in the field of MS.

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Multiple Sclerosis Immunology

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