

Advanced Practice Clinicians' Perspective: Management of Patients on Oral Disease-Modifying Therapy for Multiple Sclerosis

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INTRODUCTION

- Nurse practitioners (NPs) and physician assistants (PAs) — collectively referred to as advanced practice clinicians (APCs) — are vitally important in the diagnosis and management of patients with MS
- APCs now form a significant arm of healthcare delivery in the United States: a 2010 report showed that the total number of APCs was three-quarters the size of the physician workforce,¹ with an estimated 140,000 practicing NPs² and 83,000 practicing PAs³
- Effective treatment requires clinicians to be thoroughly knowledgeable of individual patient profiles and other key considerations when treating patients with MS in the current, rapidly evolving therapeutic landscape
- To this end, a unique panel of APCs was assembled from 30 different clinical practice settings (academia, free-standing MS centers, collaborative private practices, and independent NP practices) in the United States and Canada. The panel addressed issues of importance to patients with MS and their caregivers regarding oral disease-modifying therapies (DMTs)

OBJECTIVE

- To develop comprehensive best practice guidelines for the management of patients receiving oral DMTs based on recommendations from an expert panel comprising APCs who specialize in treating and managing patients with MS

METHODS

- The panel discussed in detail the oral DMTs available to patients with MS, and as an initial step, identified clinical and patient-centered aspects of the disease (eg, attitude, demographics, patient preference) that should be considered when profiling patients (Figure 1)
- Based on the patient profile, individuals may be classified as having the potential for a favorable, indeterminate, or poor outcome (Figure 2)
- In addition to the patient profile, the panel identified a number of other factors that have an important impact on treatment decisions, such as not insured/underinsured, low socioeconomic status, patient preference, previous experience with DMTs, and status regarding John Cunningham virus
- Using workshop clinic scenarios, the presenters role-played, assuming the role of patients with varying profiles and at different stages of therapy. The attendees were asked to interact with these “patients” and identify practical considerations for management of patients, including considerations for treatment initiation, maintenance, and long-term follow-up
- Short-term considerations: Initiating oral therapy
 - Cases for two patients considering starting oral therapy were described: one patient was treatment-naïve and the other had suboptimal response to prior DMTs
- Mid-term considerations: Ongoing patient management
 - Cases for two patients who recently started oral therapy were described and role-played. Potential issues with ongoing treatment were discussed
- Long-term considerations: Adherence and safety follow-up
 - Cases for two patients receiving oral therapy for ≥2 years were described and discussed

Figure 1. Factors Contributing to Patient Profile

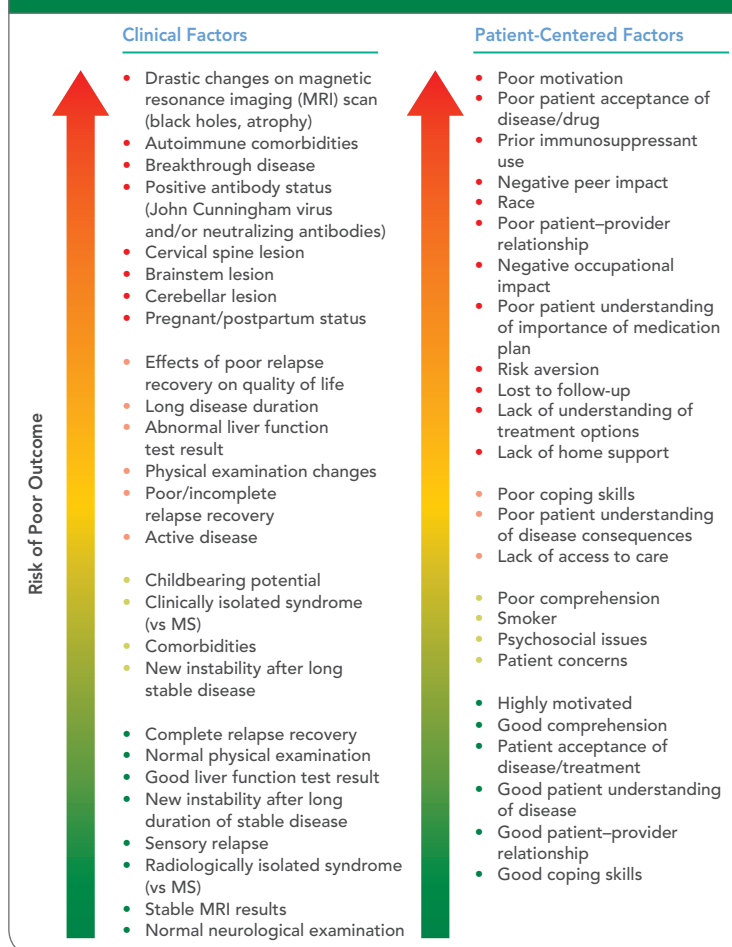
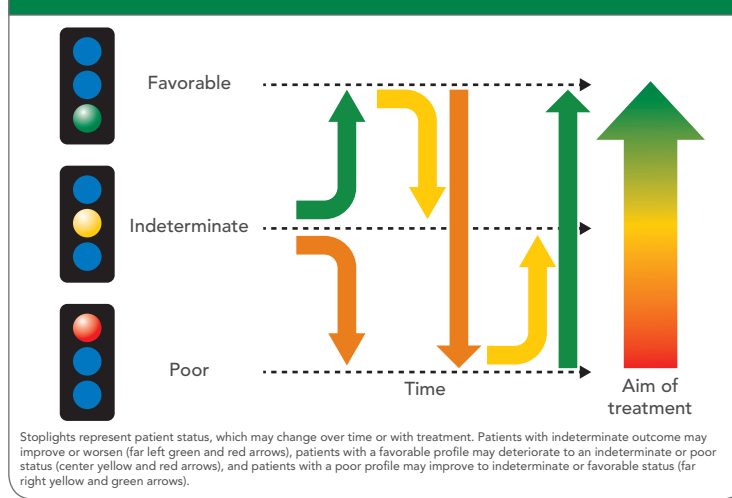


Figure 2. Possible Patient Outcomes



RESULTS

- The APC panel developed specific management strategies for multiple treatment approaches, emphasizing the needs of the individual patient. The following key factors were identified for consideration when evaluating patients for the treatment of MS: disease activity; prior DMT use; childbearing potential; general health; occupation; insurance; home life and lifestyle choices; and patient concerns
- The panel used these key patient factors and characteristics of emergent DMTs to develop a detailed set of guidelines for each specific treatment stage (Figures 3–5)

Short-term Considerations

- Based on feedback from two patients considering starting oral therapy, the APC group identified key short-term considerations for patients when initiating oral therapy (Figure 3)

Figure 3. Short-term Considerations Checklist

Clinical Factors	Patient-Centered Factors
<ul style="list-style-type: none"> Current symptoms Magnetic resonance imaging activity Previous disease-modifying therapy use/response General health Childbearing potential (patient and partner) John Cunningham virus status 	<ul style="list-style-type: none"> Understanding of MS and consequences of not treating Perception of treatment Insurance coverage Occupational/home life responsibilities Lifestyle choices Patient concerns

Mid-term Considerations

- Once a patient has initiated oral therapy, the panel concluded that key concerns revolve around tolerability and keeping the patient on treatment long enough to determine its efficacy
- Treatment-related adverse events (AEs) can have a negative impact on multiple aspects of the patient's life, which in turn can negatively affect adherence. Potential AEs or other ongoing symptoms should be immediately addressed to help the patient adhere to treatment and to rule out other medical issues
- Also, patients may not be as knowledgeable about newer oral medications and may have unrealistic expectations, so education about treatment expectations and the importance of adherence may be helpful at this stage
- Based on feedback from two patients who recently started oral therapy, the APC group identified mid-term considerations for patients who have recently started oral therapy (Figure 4)

Figure 4. Mid-term Considerations Checklist

Clinical Factors	Patient-Centered Factors
<ul style="list-style-type: none"> Current symptoms Disease history/current activity Potential adverse events with current oral medication Comorbidities General health Lifestyle 	<ul style="list-style-type: none"> Family plans Occupation Home life responsibilities Patient understanding of treatment and the implications of poor adherence Level of patient ownership/initiative

Long-term Considerations

- The panel concluded that new or ongoing symptoms are an important concern because they could indicate disease progression
- Adherence is also a potential issue because patients can become complacent or discouraged
- Re-educating patients on the consequences of untreated disease may be necessary, and reminding them of their personal goals can help motivate them to stay on treatment. If there is disease progression, providers may discuss a treatment switch, bearing in mind the individual needs of the patient
- Based on feedback from two patients receiving oral therapy for ≥2 years, the APC group identified long-term considerations for patients receiving oral therapy (Figure 5)

Figure 5. Long-term Considerations Checklist

Clinical Factors	Patient-Centered Factors
<ul style="list-style-type: none"> Current symptoms Disease history/current activity General health 	<ul style="list-style-type: none"> Adherence Treatment expectations Occupation Lifestyle habits Patient motivators Family plans

CONCLUSIONS

- The heterogeneity of MS requires highly individualized treatment plans that go beyond just managing clinical aspects of the disease; patient-centered factors, such as the impact of the disease and/or treatment on occupation or home life, motivation to treat, and level of support, also need to be considered
- Through effective treatment and patient-management strategies, outcomes and quality of life for people living with MS can be improved considerably. Patients and healthcare providers should therefore work together to set treatment goals and expectations, identifying the means to achieve them
- The short-, mid-, and long-term considerations presented here provide NPs and PAs with guidance for employing unique and effective treatment options for patients with MS who are receiving oral DMTs. These considerations may help establish best practices for individualizing treatment in MS and managing patients on oral therapies. In addition, they may help to identify and address barriers to treatment adherence and assess the benefits and risks of initiating or switching treatment

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