Disease modifying therapy in multiple sclerosis

Managing the disease course is a key component of comprehensive MS care. The goal of treatment is to control disease, including reducing the frequency and severity MS relapses (also called exacerbations or attacks), the accumulation of new damage in the central nervous system (CNS) as shown on magnetic resonance imaging, and slowing the accumulation of disability. Early and ongoing treatment with one of these medications is the best-known strategy for managing MS.

Today, more than a dozen medications have been approved by the U.S. Food and Drug Administration (FDA) to treat relapsing forms of MS (relapsing-remitting MS [RRMS] and secondary progressive MS [SPMS] in which there is evidence of active disease (relapses and/or new MRI activity). One of these medications is also approved to treat primary progressive MS (PPMS).

Different Modes of Action

The disease-modifying medications differ in the ways they affect the immune system. Soon after the diagnosis of MS is made, each person with MS and his or her healthcare provider discuss treatment options and decide which MS medication to initiate. If the medication does not work adequately or the side effects are not manageable, they can make a switch to a medication with a different mode of action and side effect profile.

Different Routes and Schedules of Delivery

These medications also differ in how they are delivered – by mouth, by injection, or by intravenous (in a vein) infusion. Some are taken every day or twice a day, while others may only be taken one a week, once a month, or every year. In addition to considering the medication’s mode of action, each patient and provider will determine which delivery route and schedule may be the most likely for the person to follow on a consistent basis.

Different Side Effects and Risks

Each of the disease-modifying therapies has its own set of potential side effects and long-term risks. Risks may include injection site reactions, infusion reactions, infections, alterations in liver function, other autoimmune conditions, cardiac problems, as well as other risks. In general, the more powerful the medication, the greater the associated risks. Each person’s goals and tolerance for risk are different, which means that individuals should work with their providers to make the appropriate medication choice.
Disease-Modifying Therapies and Pregnancy

None of the available disease-modifying therapies are approved for use during pregnancy or breast-feeding. It is essential for women and their partners who are thinking about getting pregnant to discuss treatment options with their healthcare provider.

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