

New Treatments, Better Results



In July of this year, two more medications for the treatment of Parkinson's disease (PD) became available. Rasagiline, known by the trade name Azilect®, and a new formulation of selegiline, called Zelapar®, arrived in pharmacies. Both medications inhibit the degradation of dopamine in the brain.

Most of the medical treatments developed for Parkinson's disease in the past 40 years have been directed toward increasing or enhancing the action of dopamine in the brain. After dopamine has sent a chemical message from one brain cell to another, it is recaptured by the cell that released it and is recycled for later use or removed by enzymes. These enzymes are called "monoamine oxidase" (MAO) and they break dopamine into other chemicals for disposal.

Inhibiting the MAO enzymes to prolong the action of dopamine has been studied for a long time as a method to treat PD. Within 10 years of the discovery of the dopamine deficiency in PD, publications appeared describing the role of MAO, and by the mid-1970s, a study reported that selegiline enhanced the effect of levodopa in treating PD symptoms.

Selegiline has been available in the United States since 1989. What's new is the formulation of the pill itself. Zelapar is a form of freeze-dried selegiline. Once it is placed on the tongue, the tablet, which tastes like grapefruit, dissolves instantly. The selegiline is absorbed quickly through the cheek and into the blood stream, which is more potent and efficient.

Instead of taking five milligrams twice a day, Zelapar is available at 2.5 milligrams just once a day. It is approved by the United States Food and Drug Administration (FDA) for use in conjunction with levodopa (the active ingredient in Stalevo™ and Sinemet®) to improve treatment by increasing on time and reducing off time.

Azilect is a regular pill that works by the same mechanism, inhibiting the degradation of dopamine in the brain. Azilect is also approved by the FDA as a sole agent to treat mild PD, as well as an add-on medication for people who are experiencing fluctuations. In addition, Azilect is being tested as a method to slow PD progression.

Neither Zelapar nor Azilect will replace levodopa as the primary medication for PD, nor are they likely to have a large impact on the use of medications known as dopamine agonists (Requip® and Mirapex®). Nevertheless, they are both helpful additions that give people more on time and less off time. Their once-a-day doses are convenient and generally well tolerated.

It is not known whether one drug is better than the other, since there have not been any studies comparing the two. Both drugs carry cautions about potential interactions with other drugs, including antidepressants and some pain medications (Demerol®, Ultram® and methadone), as well as the cough suppressant dextromethorphan. The FDA also cautions about an interaction between Azilect and certain foods containing a substance called "tyramine," which is found in some cheeses, cured meats, wine and beer.

Theoretically, Azilect interacts with the tyramine in these foods and may elevate blood pressure or produce stroke-like symptoms, although these side effects have not occurred at the recommended doses. As with all medications, it is important to discuss the dosage and possible side effects with your doctor. EVENT Young Parkinson's Support Group Wednesday, January 31, 6 to 7:30 p.m. Neal Hermanowicz, MD, Neurologist and Movement Disorder Specialist, and Medical Director, Phillip and Carol Traub Parkinson's Center. Annenberg Center for Health Sciences 760-773-1480