The Utility of Provigil (modafinil) in the Medical and Psychiatric Population

Harry Kerasidis M.D.

Provigil (modafinil) is categorized as a stimulant medication. It is unique in its pharmacologic effect and mechanism of action.

Sleep Disorder Related Fatigue

- Sleep Disorder Related Fatigue is the sleepiness, inattentiveness, and psychological changes resulting from disordered sleep.
- Forty million Americans suffer from a chronic sleep disorder. This translates into 17% of the workforce, working in a chronically fatigued state.
- 20% of all adults report impairing sleepiness a few days a week or more. More commonly in shift-workers (30%)
- Corporate America is losing \$18 billion each year to lost productivity due to Sleep Disorder Fatigue.
- Nearly 1/3 of all fatal-to-the-driver heavy trucking accidents are due to driver fatigue. For every driver lost, an average of 4 innocent by-standers are also lost.

Provigil (modafinil) has FDA indications for the following disorders that result in Sleep Disorder Fatigue:

- Narcolepsy, a genetic disorder of primary daytime sleepiness affecting 1 of every 2500 individuals.
- Persistent hypersomnolence in treated obstructive sleep apnea. Obstructive sleep apnea affects 5% of the population. About 15% of these individuals have persistent daytime sleepiness even when the apnea is treated.
- Shift Work Sleep Disorder, excessive sleepiness that persists in individuals engaging in shift work despite attempts to alleviate this symptom.
 - O Up to 24 million Americans work irregular shift schedules.
 - o Approximately 25% of night/rotating shift workers meet criteria for SWSD resulting in increased risks of motor vehicle accidents, work related accidents and errors, and clinically significant impairment in social and occupational function.

Provigil (modafinil) has utility in the treatment of other sleep disorders that cause excessive daytime sleepiness including idiopathic hypersonnolence syndrome, delayed sleep phase syndrome, and, paradoxically, some cases of insomnia.

Provigil (modafinil) also has utility in the treatment of other neurologic and psychiatric disorders associated with fatigue, sleepiness, or inattentivness:

Multiple Sclerosis Related Fatigue

 MS affects about 300,000 Americans. 10-20% of these individuals suffer from chronic fatigue. Provigil (modafinil) is very effective in relieving the fatigue related to MS

Parkinson's Disease Related Fatigue

 Parkinson's and the medications used to treat Parkinson's Disease often results in daytime sleepiness, which often can be offset with the use of Provigil (modafinil)

Chronic Fatigue Syndrome Fibromyalgia, & chronic pain conditions

• The fatigue related to CFS and Fibromyalgia often responds to Provigil (modafinil). Many of the medications used to treat these conditions also lead to impairing daytime sleepiness which often can be offset by Provigil (modafinil).

Attention Deficit Disorder

- Affects approximately 5% of the pediatric population, and 2-3% of the adult population.
- Double blind placebo controlled studies have shown significant improvements in multiple cognitive measures in this population without the risks attendant to the traditional stimulants used to treat this condition.

<u>Depression</u>

 In a retrospective case series, modafinil was found to augment actions of antidepressants, especially in patients with residual tiredness or fatigue. Clinical experience supports this published finding.

Provigil (modafinil) is a unique medication with proven efficacy, safety, utility and versatility; and low potential for abuse, dependence and diversion.