Using amphetamines may increase risk of Parkinson's disease

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New research shows people who have used amphetamines such as benzedrine and dexedrine appear to be at an increased risk of developing Parkinson's disease, according to a study released today that will be presented at the American Academy of Neurology's 63rd Annual Meeting in Honolulu April 9 to April 16, 2011.

Benzedrine and Dexedrine are amphetamines often prescribed to increase wakefulness and focus for people with attention deficit hyperactivity disorder and narcolepsy, a disorder that can cause excessive daytime sleepiness and sudden attacks of sleep. They are also used to treat traumatic brain injuries.

The study involved 66,348 people in northern California who had participated in the Multiphasic Health Checkup Cohort Exam between 1964 and 1973 and were evaluated again in 1995. The average age of the participants at the start of the study was 36 years old. Of the participants, 1,154 people had been diagnosed with Parkinson's disease by the end of the study.

Exposure to amphetamines was determined by two questions: one on the use of drugs for weight loss and a second question on whether people often used Benzedrine or Dexedrine. Amphetamines were among the drugs commonly used for weight loss when this information was collected.

According to the study, those people who reported using Benzedrine or

Dexedrine were nearly 60 percent more likely to develop Parkinson's than those people who didn't take the drugs. There was no increased risk found for those people who used drugs for weight loss.

"If further studies confirm these findings, the potential risk of developing Parkinson's disease from these types of amphetamines would need to be considered by doctors before prescribing these drugs as well as be incorporated into amphetamine abuse programs, including illicit use," said study author Stephen K. Van Den Eeden, PhD, with the Division of Research at Kaiser Permanente Northern California in Oakland, Calif.

Van Den Eeden explained that amphetamines affect the release and uptake of dopamine, the key neurotransmitter involved in Parkinson's disease. He explained that more research needs to be completed to confirm the association and learn more about possible mechanisms.

Provided by American Academy of Neurology