Use of CNS Medication May Reduce Cognition

BY SHERRY BOSCHERT
San Francisco Bureau

SAN FRANCISCO — Community-dwelling elderly people were more likely to show cognitive decline over a 5-year period if they took medications that act on the central nervous system, especially with higher cumulative doses or with longer use, Dr. Rollin M. Wright and her colleagues reported.

“The fact of the matter is that many older adults are on combinations of CNS medications,” said Dr. Wright of the University of Pittsburgh. In some patients, physicians may want to consider adjusting individual drug doses to lower the cumulative CNS medications dose while retaining the benefits of each medication, she suggested at the annual meeting of the Gerontological Society of America.

Use of CNS-active medications for 2 or more years was associated with a 39% increased risk of cognitive decline, compared with no use of the medications.

The investigators gathered information about medication use from containers brought in by participants and assessed cognitive function using Teng’s Modified Mini-Mental State Examination (3MS), they wrote in their poster.

Use of CNS-active medications including benzodiazepines, opioid receptor agonists, antipsychotics, or antidepressants was not associated with new-onset cognitive impairment (defined as a 3MS score below 80) but was associated with new development of cognitive decline (defined as a decrease of 5 or more points on the 3MS), said Dr. Wright and her associates. She has no association with companies that make the medications being used by patients in the study, which was partially funded by the National Institute on Aging.

Any use of the CNS-active medications was associated with a 36% increased risk of cognitive decline after adjustment for the effects of sociodemographic factors, health behavior, health status, and the indications for CNS medication use. Long-term use of CNS-active medications, defined as 2 or more years of use, was associated with a 39% increased risk of cognitive decline, compared with no use of the medications, she said.

Participants on the highest cumulative doses of CNS-active medications had the greatest increased risk for cognitive decline. To measure the cumulative CNS-medication dose, the investigators divided a participant’s daily dose for an individual medication by the minimum effective geriatric daily dose to calculate a standardized daily dose (SDD) and then added up the SDDs for each person. Those using the highest cumulative dose of more than three SDDs had an 82% increased risk of cognitive decline, compared with nonusers of the medications.

CNS-active drug use increased from 14% of participants at baseline to 15% of 2,284 participants at year 3, with 3% of the cohort at year 3 using the highest doses and 11% reporting long-term use. Between baseline and year 3, 20% showed cognitive decline.

At year 5, 17% of 1,907 participants evaluated were using CNS-active medications, again with 3% on the highest doses and 11% reporting long-term use. After excluding participants who showed cognitive decline at year 3, 14% of participants at year 5 showed new cognitive decline, Dr. Wright and her associates reported. The researchers plan further studies to try to identify thresholds between benefits and risks of medication use, and to look at interventions that might help balance the benefits and risks when making decisions about medication dosing.

Indications for CNS-active medication use in the study included sleep problems in 11%, anxiety in 34%, osteoarthritis in 15%, cancer in 18%, depression in 4%, and moderate or worse bodily pain in 40%.

The study cohort was 53% female and 37% black, with a mean age of 74 years. ■

References:

Because many disorders have symptoms resembling those of narcolepsy—excessive daytime sleepiness, cataplexy, disturbed nocturnal sleep, hypnagogic and hypnopompic hallucinations, sleep paralysis—a differential diagnosis including narcolepsy is often required.4–5

For additional information, call 1-800-206-8115 or e-mail info@narcolepsyDx.com. You can help narcolepsy patients finally get the recognition and treatment they deserve.