MedicalXpress

Study shows stimulant drug may help women cope with post-menopausal memory lapses

May 5 2014, by Lee-Ann Donegan

Menopausal women have long reported experiencing hot flashes, mood swings, night sweats and memory lapses, too.

A new study from researchers in the Perelman School of Medicine at the University of Pennsylvania shows preliminary evidence that the psychostimulant drug lisdexamfetamine (LDX) can aid post-menopausal women by improving attention and concentration, organization, working memory and recall. The findings will be presented by C. Neil Epperson, MD, director of the Penn Center for Women's Behavioral Wellness, on Tuesday during the American Psychiatric Association annual meeting at the Jacob K. Javits Convention Center in New York City.

Dr. Epperson's study enrolled 30 women between the ages of 48 and 60 who had experienced a diminished ability to focus and multi-task in their early post-menopausal years. The cohort was made up of successful women –none of whom were more than five years post-menopause.

The double-blind, placebo-controlled crossover study gave participants a four week regimen of LDX (which has been approved by the FDA for the treatment of ADHD) as well as four weeks of placebo to assess the drug's effectiveness in reducing subjective, new-onset executive function difficulties, and improving performance on verbal recall, working memory and attention tasks.

A subset of women also underwent brain imaging, functional MRI and proton magnetic resonance spectroscopy to assess brain activation and

dorsal lateral prefrontal cortex neurochemistry.

The women were then asked to report their level of executive function across five domains: Organization and motivation for work; concentration and attention; alertness, effort and processing speed and managing affective interference, the tendency to overly focus on the emotion of a message; and working memory and recall.

Preliminary data show that all executive function domains, except managing affective interference, showed a significant reduction in severity of symptoms during active LDX treatment versus treatment with placebo. In one domain, organization and motivation for work, the severity of reported impairment predicted the degree of response to LDX treatment such that women with greater severity of symptoms in this domain found the greatest improvement with LDX treatment.

"While some individuals experienced no improvement with LDX, we were heartened by these findings and hope to examine the genetic profile of our participants in the near future to determine whether there are predictors regarding who is is most likely to experience improvement with this kind of treatment," says Epperson.

"We know that estradiol treatment is helpful in only a subset of the population of menopausal women with cognitive and mood complaints and for many women estradiol treatment is not an option due to their medical history. It is crucial that we identify treatment options for those women who experience significant changes in cognition during this transition, whether it occurs naturally or is induced by surgery or chemotherapies."

She suggests that additional research will be necessary to determine if pyschostimulants that work for very different, but related, conditions, might be an option for these menopausal women with executive function

issues.

More information: Epperson will present the abstract "Mid-life Onset of ADHD-like Cognitive Impairments in Menopausal Women," on Tuesday, May 6th in Room 1E09, Level 1 location from 2 p.m. to 5 p.m.

Provided by University of Pennsylvania School of Medicine