

Hot flashes impair memory performance

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If you're having difficulty identifying the right word to express yourself clearly or remembering a story correctly, you may blame menopause. A new study suggests that physiologic hot flashes are associated with decreased verbal memory and with alterations in brain function during encoding and retrieval of memory, especially in the hippocampus and prefrontal cortex. Study results are published online in *Menopause*, the

journal of The North American Menopause Society (NAMS).

Previous studies have already shown that women experience a decline in memory for verbal material, such as words and stories, as they transition through menopause. In this new study, [functional magnetic resonance imaging \(MRI\)](#) was used to document the occurrence of physiologic hot flashes and their specific effect on hippocampal and [prefrontal cortex](#) function during encoding and recognition conditions of a memory task. The strengths of this study are in the use of physiologic hot flash monitoring to confirm the [hot flash](#) versus relying on patient recall and the use of functional MRI to specifically evaluate real-time changes occurring within the brain during the memory testing.

Although larger studies are needed to fully evaluate the reliability of the relationship between hot flashes and altered brain function, this study provides new insights into specific areas in the brain involved in memory that appear to be adversely affected by hot flashes.

The study results appear in the article "Hot flashes are associated with altered [brain function](#) during a memory task."

"The findings of this preliminary study, although small, support an association between objectively monitored hot flashes and adverse functional changes in the brain that affect memory. Further study is needed to determine whether hot flashes actually cause these brain changes and whether treatment of hot flashes will prevent or normalize them," says Dr. Stephanie Faubion, NAMS medical director.

More information: Pauline M. Maki et al. Hot flashes are associated with altered brain function during a memory task, *Menopause* (2020).

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