Medical Xpress

Larger belly in mid-life increases risk of dementia

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People with larger stomachs in their 40s are more likely to have dementia when they reach their 70s, according to a study published in the March 26, 2008, online issue of *Neurology*, the medical journal of the American Academy of Neurology.

The study involved 6,583 people age 40 to 45 in northern California who had their abdominal fat measured. An average of 36 years later, 16 percent of the participants had been diagnosed with dementia. The study found that those with the highest amount of abdominal fat were nearly three times more likely to develop dementia than those with the lowest amount of abdominal fat.

“Considering that 50 percent of adults in this country have an unhealthy amount of abdominal fat, this is a disturbing finding,” said study author Rachel A. Whitmer, PhD, a Research Scientist of the Kaiser Permanente Division of Research in Oakland, CA, and member of the American Academy of Neurology. “Research needs to be done to determine what the mechanisms are that link abdominal obesity and dementia.”

Having a large abdomen increased the risk of dementia regardless of whether the participants were of normal weight overall, overweight, or obese, and regardless of existing health conditions, including diabetes, stroke and cardiovascular disease.

Those who were overweight and had a large belly were 2.3 times more likely to develop dementia than people with a normal weight and belly

size. People who were both obese and had a large belly were 3.6 times more likely to develop dementia than those of normal weight and belly size. Those who were overweight or obese but did not have a large abdomen had an 80-percent increased risk of dementia.

A large belly in mid-life has also been shown to increase the risk of diabetes, stroke, and coronary heart disease, but this is the first time researchers have demonstrated that it also increases risk of dementia.

In the study, women were more likely than men to have abdominal obesity, along with non-whites, smokers, people with high blood pressure, high cholesterol or diabetes, and those with less than a high school level of education.

As with all observational studies, it is possible that the association of the abdominal obesity and dementia is not driven by the abdominal obesity, but rather by a complex set of health-related behaviors, for which abdominal obesity is but one part.

“Autopsies have shown that changes in the brain associated with Alzheimer’s disease may start in young to middle adulthood, and another study showed that high abdominal fat in elderly adults was tied to greater brain atrophy,” Whitmer said. “These findings imply that the dangerous effects of abdominal obesity on the brain may start long before the signs of dementia appear.”

Source: American Academy of Neurology