Early menopause could increase the risk of senile dementia

According to a study conducted in the United Kingdom, the probability of developing dementia changes based on the age of menopause. For those who enter before the age of 40 the risk would be 35% higher than the average

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Early menopause can be a risk factor for neurodegenerative diseases such as dementia and Alzheimer's, and hormone replacement therapy can prevent or delay the process: there are several studies that have investigated and found this correlation in recent years. But what exactly does early menopause mean and how much does the risk increase? The answer is a study just presented at the 2022 edition of the American Heart Association conference on epidemiology, prevention, lifestyle and cardiometabolic health. The survey, conducted on a large sample of women in the United Kingdom, shows that those who enter menopause before the age of 40 have a 35% greater risk of developing some type of dementia in subsequent years.

The "hormonal causes" of dementia

Dementia is the result of certain physiological changes in the brain that impair a person's ability to remember, make decisions and use language. Alzheimer's disease is the most common form, followed by vascular dementia — a type of dementia induced by disruptions in blood flow to brain cells following a stroke or the buildup of plaque in the arteries that supply blood to the brain. With the onset of menopause, the risk of having a stroke increases greatly, and with it the risk of developing vascular dementia. The lack of estrogen, in fact, increases oxidative stress in the long term, accelerating brain aging and cognitive deterioration.

"Estradiol (an estrogen steroid hormone produced by the ovaries and involved in the regulation of the menstrual cycle, ed.) plays an important role in a wide range of neurological functions in the brain," Wenting Hao, a doctoral student at Shandong University in Jinan, explains to Health. in China, and first author of the study. "So reductions in endogenous estrogen at menopause may exacerbate brain changes linked to neurodegenerative diseases and accelerate the progression of dementia.".

Increased risk of dementia

Researchers analyzed the possible relationship between the age at which menopause began and the diagnosis of dementia (of any type). Data from 153,291 women in the UK with an average age of 60 between 2006 and 2010 were examined, and diagnoses of all types of dementia were considered, including Alzheimer's disease, vascular dementia and others. They then calculated the risk of onset in terms of the age at which women reported entering menopause and compared it to that of women who entered menopause at the average age according to the statistics (50-51 years).

The results show, as we were saying, that compared to women who enter menopause around the age of 50, women who experience a very early menopause (before the age of 40) are 35% more likely to develop some type of dementia. Furthermore, in the sample analyzed, women who entered menopause before age 45 were also 1.3 times more likely to develop dementia before age 65. However, the process does not apply in reverse: women who entered menopause later, at age 52 or older, showed a similar risk of dementia to women who entered menopause in middle age. As explained above, one might expect that the dementia these women suffer from is vascular in origin, but this data does not emerge clearly in the study. "The sample size of women with vascular dementia was too small – comments the researcher – and therefore we do not believe that our results are significant with respect to this question".

The role of hormone replacement therapy

Dementia can be prevented, and there are several ways women who enter menopause early can reduce their risk. These include exercising daily, participating in recreational and educational activities, not smoking or drinking alcohol, maintaining a healthy weight, monitoring your vitamin D level, and, if deemed necessary by your doctor, taking supplements of football. Obviously menopause itself can be delayed, and several studies have been conducted on the role of hormone replacement therapy, also in relation to the risk of developing dementia. "Compared to women in whom menopause occurs at the age of 50-51 - concludes Hao - women in whom this occurs before the age of 45 and who do not use hormone replacement therapy have a greater risk of dementia (of all types and causes) of those who instead take hormone replacement therapy".