

Hormone replacement therapy (HRT) is not linked to an increased risk of developing dementia, according to the largest study of its kind.

The treatment is used by millions of women worldwide to relieve menopausal symptoms such as hot flashes, sleep disturbance, mood swings, memory losses and depression.

In the UK, about 14% of women aged between 50 and 59 use HRT, and about 5% of those aged 40 to 49 and 60 to 69, researchers said. Some menopausal symptoms are similar to early signs of dementia.

Previous research into HRT and dementia has been inconsistent.

Laboratory studies and small trials have suggested a beneficial link between oestrogen and age-related brain decline. However, a randomised controlled trial found an increased risk of developing dementia among users of oestrogen-progestogen treatments. Two Finnish studies have also provided conflicting results.

To try to end years of uncertainty, researchers at the University of Oxford, Southampton and Nottingham set out to investigate the risks of developing dementia for women using any of the forms of HRT commonly prescribed within the NHS.

Their study, involving more than 600,000 women over three decades, concluded that HRT is not linked to an increased risk of dementia. The findings were published in the BMJ.

“This large observational study found no overall association between use of menopausal hormone therapy and risk of developing dementia,” the authors wrote. “This finding was consistent across different types of hormones, doses, applications, and time of hormone therapy initiation.”

The researchers added that the study “brings clarity to previously inconsistent findings and should reassure women in need of menopausal hormonal therapy”.

They used primary care databases to analyse HRT prescriptions for 118,501 women in the UK aged 55 and older diagnosed with dementia between 1998 and 2020, and 497,416 women matched by age and general practice, but with no records for dementia.

Other relevant factors, such as family history, smoking, alcohol consumption and pre-existing conditions, were taken into account in the analysis.

After adjusting for the full range of potentially confounding factors, the researchers found no overall associations between use of hormone therapy and risk of dementia, regardless of hormone type, application, dose, or duration of treatment.

There were different findings among some of the sub-groups within the study. In women younger than

80 who had been taking oestrogen-only therapy for 10 years or more, researchers found a 15% reduced risk of dementia.

However, an analysis of cases with a specific diagnosis of Alzheimer's disease showed a slight increase in risk associated with oestrogen-progestogen therapy.

Women taking oestrogen-progestogen therapy for between five and nine years had an 11% increased risk and those taking it for over a decade were deemed to have a 19% heightened risk. Researchers described this as being equivalent to, respectively, five and seven extra cases per 10,000 woman years.

The study was observational, so cannot establish cause, and the researchers acknowledged some limitations, such as incomplete recording of menopausal symptoms, particularly for women registered after their menopause, that may have affected their results.

However, the study used a large data sample from primary care records and is the first of its kind to assess overall risk for women exposed to different types of HRT.

"The findings will be helpful to policymakers, doctors and patients when making choices about hormone therapy," they concluded.

In a linked opinion piece in the BMJ, Prof Pauline Maki, from the University of Illinois, and Prof JoAnn Manson, from Harvard Medical School, said the results should provide "reassurance" for women.

Source: [HRT not linked to increased risk of dementia, says study](#)