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## Press release

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### **Benzodiazepines and Alzheimer's disease: the risk increases with duration of exposure**

Researchers at Inserm Unit 657, “Pharmacoepidemiology and evaluation of the impact of health products on the population,” report new results on the link between benzodiazepines and dementia. In this study, published in the *British Medical Journal (BMJ)*, they confirm that the use of benzodiazepines for three months or longer was associated with an increased risk of developing Alzheimer’s disease after the age of 65 years. The case-control study shows that the longer the exposure, the closer the association. The researchers therefore recommend monitoring the proper use of these drugs and limiting their intake to the recommended periods.

Benzodiazepines are prescribed by physicians for symptoms of anxiety and sleep disturbances for a recommended period of several weeks. In [2012](#), a study by Inserm Unit 657, “Pharmacoepidemiology and evaluation of the impact of health products on the population,” had shown, for a French cohort, that subjects using benzodiazepines showed an approximately 50% greater risk of developing dementia compared with those who had never taken them. In this new study, the researchers set out to confirm the association in another cohort, particularly the potential **dose-effect relationship**.

The researchers studied the database of the Quebec Health Insurance Board (RAMQ) to analyse the development of Alzheimer’s disease in a sample of patients aged over 66 years and living in Quebec (Canada) who had been prescribed benzodiazepines. They identified 1,796 cases of Alzheimer’s disease and monitored them for a period of at least 6 years. To carry out the case-control study, they then compared each of these cases with 7,184 healthy people of corresponding age, sex and duration of monitoring.

Results show that the use of benzodiazepines for three months or longer was associated with an increased risk (up to 51%) of later developing Alzheimer’s disease. *The association become closer with more prolonged exposure and with the use of long-acting benzodiazepines compared with short-acting benzodiazepines,*” explains Sophie Billioti de Gage, a researcher at Inserm.

In conclusion, the researchers stress that although the cause and effect relationship has not been proven, the stronger association seen with long-term exposure *“supports the suspicion of a possible direct link, although benzodiazepines may also be an early marker of a state associated with an increased risk of dementia.”*

Benzodiazepine use is frequent and more likely to be chronic among older people. Nonetheless, benzodiazepines are useful drugs for the treatment of transient anxiety and insomnia. The authors therefore call for greater awareness of and compliance with good

practices in their use, such as appropriate prescription for a short period.

*“This would help to ensure that use of these drugs is limited to several weeks, a period for which the researchers did not observe negative implications for the risk of subsequent dementia,”* emphasises Sophie Billoti de Gage.

## Source

### **Benzodiazepine use and risk of Alzheimer’s disease: case-control study**

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### **For further information:**

Read [Rep  re en   pid  miologie](#) (Guide to epidemiology)

Read the [press release from 28.09.2012 – Benzodiazepine use and dementia in the over 65s](#)

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