

Z-drugs linked with bone fractures in dementia patients

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Drugs to help dementia patients sleep better are linked to an increased risk of bone fractures according to new research from the University of East Anglia.

Researchers investigated [dementia](#) patients taking commonly-prescribed sleep drugs, known as Z-drugs (zolpidem, zopiclone and zaleplon).

They found that [people](#) with dementia who take Z-drugs are more likely to fracture a bone than those who are not taking Z-drugs.

One frequent consequence of [fractures](#), particularly hip fractures, is an increased rate of mortality.

Their findings will be presented today at the Alzheimer's Association International Conference (AAIC) in Chicago (US).

The team say that while they cannot be certain that adverse problems are caused by non-benzodiazepine hypnotic "Z-drugs," doctors should avoid prescribing them if sleep disturbances can be managed by other means.

Lead researcher Prof Chris Fox, from UEA's Norwich Medical School, said: "Around half of people with dementia have trouble sleeping, wake often and wander during the night. This can greatly affect their quality of life and that of the people who care for them.

"Z-drugs are commonly prescribed to help treat insomnia but it is

thought that they may cause increased confusion and other problems such as falls and fractures.

"People with dementia are especially vulnerable and it is not clear whether Z-drugs are particularly harmful for them."

Prof Fox, along with colleagues from Aston University, University College London, Newcastle University and the University of Exeter, analysed existing data from the medical records of people with dementia.

Lead pharmacist on the study Dr. Ian Maidment, from Aston University, will present the research in Chicago later today. He said: "We compared data for 2,952 people with dementia who were newly prescribed Z-drugs with data for 1,651 who were not – in order to evaluate the benefits and harms of these medicines.

"We found that the use of Z-drugs is associated with a 40 per cent increased risk of any type of fracture, with risk increasing for those on higher doses. Z-drug use was also associated with a greater risk of hip fracture.

"People living with dementia should only be prescribed a hypnotic if the benefits clearly outweigh the risks, and any such prescription should be regularly reviewed," he added.

Prof Fox said: "Fractures in people with dementia can have a devastating impact, including loss of mobility, increased dependency, and death. We desperately need better alternatives to the drugs currently being prescribed for sleep problems and other non-cognitive symptoms of dementia."

The study found no evidence for higher risk of other hypothesised

effects such as infections, stroke or worsening cognitive function.

The study also did not directly identify a higher risk of falls, however the researchers say that this could be down to how adverse effects are recorded.

Prof Fox said: "Fractures often happen as a result of falls. However, if an elderly person falls and fractures a bone, it would be recorded simply as a fracture rather than a fall.

"Wherever possible, we recommend that people with dementia avoid using Z-drugs if their sleep disturbance can be managed in other ways. Non-pharmacological alternatives should be considered, and when Z-drugs are prescribed, patients should receive care that reduces or prevents the occurrence of falls."

Prof Clive Ballard, from the University of Exeter Medical School, said: "Research into antipsychotics highlighted that they increased harmful side effects and death rates in people with dementia. This compelling evidence base helped persuade everyone involved in the field to take action, from policy makers to clinicians, reducing prescribing by 50 per cent. We now urgently need a similar concerted approach to Z-drugs, to protect frail elderly people with dementia from fractures and increased risk of death."

The ZED (Z drugs in Dementia) study is led by the University of East Anglia in collaboration with researchers at Aston University, University College London, Kings College London and Newcastle University.

"Beyond Anti-Psychotics: Exploring Efficacy and Harms of Z-Drugs for Sleep Disturbance" will be presented at the Alzheimer's Association International Conference in Chicago (US), on Tuesday, July 24, 2018.

Provided by University of East Anglia

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