New antidepressants increase risks for elderly



03 Aug 2011 09:34:19.980

PA 237/11  
  
Older people taking new generation antidepressants are at more risk of dying or suffering from a range of serious health conditions including stroke, falls, fractures and epilepsy, a study involving researchers at The University of Nottingham has found.  
  
The research, published on [bmj.com](http://www.bmj.com),with a full report due on [www.hta.ac.uk](http://www.hta.ac.uk) discovered that selective serotonin reuptake inhibitors (SSRIs) are more strongly associated with an increased risk of several adverse outcomes in people over the age of 65 with depression compared with older tricyclic antidepressants (TCAs).  
  
The authors say the risks and benefits of different antidepressants should be carefully considered when prescribing these drugs to elderly patients and have called for further research to investigate the findings.

Dr Carol Coupland, Associate Professor in Medical Statistics in The University of Nottingham’s Division of Primary Care said: “We’ve found some evidence from our study that the older tricyclic antidepressants may be associated with lower risks of several adverse outcomes compared with newer antidepressants in older people diagnosed as having depression.  
  
“This was an unexpected finding, and so further research using other data sources is needed to confirm these findings as well as provide more evidence on the benefits of different antidepressants in this group of people.”  
  
Depression is a common condition in older people and antidepressants — particularly SSRIs — are widely used.

However, very little is known about the safety of these drugs in older people.  
  
The team of researchers from the Universities of Nottingham and East Anglia set out to investigate the potential link between antidepressant treatment and the risk of a number of potentially life-threatening outcomes in older people.  
  
They identified 60,746 UK patients aged 65 and over with a newly diagnosed episode of depression between 1996 and 2007 using the QResearch primary care database.

Many patients had other conditions, such as heart disease and diabetes, and were taking several medications.  
  
Patients were tracked until the end of 2008.

During this time, 89 per cent (54,038) received at least one prescription for an antidepressant, and a total of 1,398,359 prescriptions for antidepressants were received.

Of these 57 per cent were for SSRIs, 31 per cent for TCAs, 0.2 per cent for monoamine oxidase inhibitors (MAOIs) and 13.5 per cent for other antidepressants.  
  
Antidepressant use was then analysed against several adverse outcomes including all-cause mortality, attempted suicide or self harm, heart attack, stroke, falls, fractures, epilepsy or seizures and high salt levels in the blood (hyponatraemia).  
  
After adjusting for factors that could affect the results, including age, sex, severity of depression, other illnesses and use of other medications, the team found that SSRIs and drugs in the group of other antidepressants were associated with an increased risk of several adverse outcomes compared with TCAs.  
  
Those taking SSRIs were more likely to die, suffer a stroke, fall or fracture, have epilepsy or a seizure and have hyponatraemia compared with TCAs.

The group of other antidepressants were associated with an increased risk of mortality, attempted suicide or self-harm, stroke, fracture and epilepsy or seizures.  
  
Patients in the study had a seven per cent risk of dying over one year while they were not taking antidepressants, while the comparable risks were 8.1 per cent when taking TCAs, 10.6 per cent for SSRIs and 11.4 per cent for the group of other antidepressants.

For stroke, one-year risks were 2.3 per cent, 2.6 per cent and three per cent (compared with 2.2 per cent when not on antidepressants) and for fracture they were 2.2 per cent, 2.7 per cent and 2.8 per cent compared with 1.8 per cent.  
  
Among individual drugs trazodone, mirtazapine and venlafaxine carried the highest risk for some adverse outcomes.  
  
Rates of most adverse outcomes were highest in the 28 days after starting the antidepressant and also in the 28 days after stopping.  
  
The authors also point out that TCAs were prescribed at lower doses than SSRIs and other antidepressant drugs, which they say “could in part explain our findings.”

They also caution that differences between patients prescribed different antidepressant drugs may account for some of the associations seen in the study, underlining the need for further research to confirm the findings.

* *Barbara Brady, Consultant in Public Health at NHS Nottinghamshire County, said: “It is important that anyone taking anti-depressants continues to take their medication.*
* *Anyone who has concerns, or is thinking about not taking their medication, should seek medical advice as soon as possible.”*

**— Ends —**

**Notes to editors:** The University of Nottingham, described by The Sunday Times University Guide 2011 as ‘the embodiment of the modern international university’, has award-winning campuses in the United Kingdom, China and Malaysia. It is ranked in the UK's Top 10 and the World's Top 75 universities by the Shanghai Jiao Tong (SJTU) and the QS World University Rankings. It was named ‘Europe’s greenest university’ in the UI GreenMetric World University Ranking, a league table of the world’s most environmentally-friendly higher education institutions, which ranked Nottingham second in the world overall.  
  
The University is committed to providing a truly international education for its 40,000 students, producing world-leading research and benefiting the communities around its campuses in the UK and Asia.  
  
More than 90 per cent of research at The University of Nottingham is of international quality, according to the most recent Research Assessment Exercise, with almost 60 per cent of all research defined as ‘world-leading’ or ‘internationally excellent’. Research Fortnight analysis of RAE 2008 ranked the University 7th in the UK by research power. The University’s vision is to be recognised around the world for its signature contributions, especially in global food security, energy & sustainability, and health.  
  
More news from the University at: [www.nottingham.ac.uk/news](http://www.nottingham.ac.uk/news)

**Story credits**

**More information** is available from **Dr Carol Coupland** by email at [carol.coupland@nottingham.ac.uk](mailto:carol.coupland@nottingham.ac.uk); **Professor Julia Hippisley-Cox** by email at [julia.hippisley-cox@nottingham.ac.uk](mailto:julia.hippisley-cox@nottingham.ac.uk)

Emma Thorne

Emma Thorne - Media Relations Manager

**Email:** [emma.thorne@nottingham.ac.uk](mailto:emma.thorne@nottingham.ac.uk?Subject=Enquiry) **Phone:** +44 (0)115 951 5793 **Location:** University Park