Dangerous blood clots increased with newer antipsychotic drugs

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Taking newer types of antipsychotic drugs could increase a person's risk of developing dangerous blood clots, according to a new University of Nottingham study published on bmj.com today.

Venous thromboembolism — a collective term for deep vein thrombosis and pulmonary embolism — is an important and preventable cause of illness and death. Up to a quarter of affected patients die within a week and almost a third of survivors experience long-term effects.

There is already limited evidence that antipsychotic drugs, some of which are also prescribed for nausea, vomiting and vertigo, may be associated with an increased risk of venous thromboembolism.

Previous studies, however, have been small and restricted to certain population groups, or have not included newer 'atypical' antipsychotic drugs.

Researchers from The University of Nottingham and the Nottinghamshire County Teaching Primary Care Trust examined how these drugs affected people taking them, looking at the type of drug used, and the potency and dose involved.

Data for this study came from the UK QResearch primary care database, which holds the anonymised primary care clinical records of more than 11 million people registered at any time in the past 16 years with 525 UK general practices.

The Nottingham researchers, led by Professor Julia Hippisley-Cox at The University of Nottingham, looked at 25,532 eligible cases — 15,975 with deep vein thrombosis and 9,557 pulmonary embolism — recorded between 1996 and 2007 in people aged between 16 and 100.

The cases were compared with 89,491 controls and showed that people prescribed antipsychotics in the previous 24 months had a 32 per cent greater risk of venous thromboembolism than non-users, even after adjusting for potential risk factors.

Risks were higher for new users, the researchers found, as patients who had started a new drug in the previous three months, had about twice the risk.

The risk was even greater for individuals prescribed atypical rather than conventional drugs. It also tended to be greater for patients prescribed low rather than high potency drugs.

However, the authors point out that the absolute risks were low, with an excess of four extra cases of venous thromboembolism per 10,000 patients treated over one year in patients of all ages, and 10 for patients aged 65 and over.

They conclude: “Though these findings add to the accumulating evidence of adverse health events associated with antipsychotic drugs, they should be confirmed with other data sources.

“If other studies replicate these findings, antipsychotic drugs should be used more cautiously for nausea and agitation etc, especially among patients at high risk of thromboembolism. Patients need information on the balance of risks and benefits of these drugs before they start treatment.”

In an accompanying editorial, geriatrics experts Rosa Liperoti and Giovanni Gambassi argue that a higher risk means treatment should be tailored according to individual risk factors.

“In clinical practice we need to be able to identify the best candidates for antipsychotic treatment … and those who may be more susceptible to developing side effects as a result of individual vascular risk factors possibly interacting with antipsychotics,” they say.

More information: URL for the paper: www.bmj.com/cgi/doi/10.1136/bmj.c4245

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