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**Underlying disease may increase mortality risk in users of atypical antipsychotics**

Li ZP *et al*. Underlying disease and mortality rate

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**Abstract**

Schizophrenia is a group of the most common types of mental illness. Commonly used antischizophrenia drugs all increase mortality to some extent. The increased risk of death in older individuals and patients with dementia using atypical antipsychotics may be due to myocardial damage, increased mobility and increased risk of stroke.

**Key Words:** Aripiprazole; Atypical antipsychotics; Dementia; Mortality rate; Psychiatry

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**Core Tip:** Schizophrenia is a group of the most common types of mental illness. Type I schizophrenia involves mainly positive symptoms and type II schizophrenia involves mainly negative symptoms. The patients are indifferent and lack initiative. Clinically, atypical antipsychotics are often used as first-line drugs for first-episode schizophrenia. Although antipsychotics may increase mortality to some extent, observational studies suggest that atypical antipsychotics are associated with a lower risk of all-cause mortality when compared with conventional antipsychotics.

**TO THE EDITOR**

We were interested to read the article by Phiri *et al*[1], which was published in the *World Journal of Psychiatry*. The authors used mega data, python software, *etc.* to summarize and analyze nearly 2000 clinical reports. They point to the commonly used atypical antipsychotics such as olanzapine and risperidone increasing the risk of death in people with dementia; however, the data analysis of this study showed that the association between quetiapine and the increased risk of death in patients with dementia was insignificant. Their study promoted the research and development of drugs for mental disorders in patients with dementia, and encouraged a normative role in the medication prescribed by clinicians in primary and secondary medical institutions, which has considerable reference significance. Although the research work of the author and his team has been sufficient, and the conclusions drawn are also supported by big data, we believe that some points of this article are worthy of further exploration. We would like to contribute to the debate and look forward to hearing from the authors.

Schizophrenia is a group of the most common types of mental illness, characterized by incoordination between thinking, emotion and behavior, and separation of mental activities from reality[2,3]. Schizophrenia includes two subtypes. Type I is mainly characterized by positive symptoms, and patients report hallucinations and delusions. Type II is mainly characterized by negative symptoms, and patients report apathy and lack of initiative[4]. At present, the commonly used classical antipsychotics drugs include chlorpromazine, Chlorprothixene, also called tardan, is a representative of the thiaxanthene class of anti-schizophrenia drugs, *etc.* However, long-term use of classical antipsychotics usually causes extrapyramidal reactions, that is, the patient’s ability to regulate fine motion is weakened. The later developed atypical antipsychotics have obvious advantages over classical antipsychotics. First, atypical antipsychotics are well tolerated, show good compliance, and rarely cause extrapyramidal reactions. Second, atypical antipsychotics are better than classic antipsychotics in treating the negative symptoms of psychosis. Clinically, atypical antipsychotics are often used as first-line drugs for first-episode schizophrenia. Although antipsychotics may increase mortality to some extent[5,6], observational studies suggest that atypical antipsychotics are associated with a lower risk of all-cause mortality when compared with conventional antipsychotics[7].

Farlow and Shamliyan[8] have reported modest improvements in neuropsychiatric symptoms with aripiprazole, risperidone and olanzapine compared with placebo. Aripiprazole, risperidone, quetiapine and olanzapine are associated with increased odds of acute myocardial invasion, and risperidone and olanzapine with increased odds of hip fracture. Observational studies have shown no difference in all-cause mortality with atypical antipsychotics, and atypical antipsychotics are associated with a lower risk of all-cause mortality and extrapyramidal symptoms compared with conventional antipsychotics, but a higher risk of stroke. Therefore, there is reason to believe that the increased risk of death in older and dementia patients given atypical antipsychotics may be due to myocardial damage, increased mobility, and increased risk of stroke.

The authors refer to the use of atypical antipsychotics such as aripiprazole in patients with dementia and highlight the risk of death with aripiprazole. Use of aripiprazole has been reported in patients with dementia, but it is associated with a higher risk of cardiac arrest, fractures, constipation, extrapyramidal disorders, somnolence and apathy[8,9]. Therefore, for use of aripiprazole for treatment of schizophrenia in older people, special attention should be paid to the adverse effects of aripiprazole, in addition to the decline in drug metabolism caused by age. The authors did not explain why aripiprazole increases the risk of death in dementia patients, so we suggest that the authors add relevant content.

***Conclusion***

The increased risk of death among dementia patients using atypical antipsychotics may be due to underlying diseases or to a different baseline risk of death.

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