National Institute of Mental Health (NIMH)/National Institutes of Health (NIH): Preventive Treatment To Reduce Depression Following a Stroke

NIMH-funded researchers have shown that preventive treatment with an antidepressant medication or talk therapy can significantly reduce the risk or delay the start of depression following an acute stroke.

Lead Agency:

National Institute of Mental Health (NIMH)

National Institutes of Health (NIH)

Agency Mission:

The mission of NIMH is to transform the understanding and treatment of mental illnesses through basic and clinical research, paving the way for prevention, recovery, and cure.

Principal Investigators:

Dr. Robert Robinson

Department of Psychiatry University of Iowa 200 Hawkins Drive 2887 JPP Iowa City, IA 522421057

General Description:

Over 700,000 people in the United States suffer a stroke every year. Those who suffer an acute stroke are at increased risk for developing post-stroke depression, which can impede rehabilitation and recovery of functional skills, reduce quality of life, and may also shorten an individual's lifespan. Thus, prevention of post-stroke depression is an important goal.

Recent NIMH-funded research has shown that preventive treatment with an antidepressant medication or talk therapy can significantly reduce the risk or delay the start of depression following an acute stroke. The study compared the effects of the antidepressant medication escitalopram (Lexapro) with placebo in adults, ages 50-90, who had suffered an acute stroke within the previous three months. Another group of individuals were randomly selected to receive Problem Solving Therapy (PST), a talk therapy that helps people identify problems that interfere with daily living and contribute to depressive symptoms. PST then helps the individuals develop strategies to solve those problems. People who received either escitalopram or PST were less likely to develop depression (8.5 percent and 11.9 percent, respectively) than those who received the placebo (22.4 percent).

This is the first study of its kind to show some cases of post-stroke depression can be preempted with early intervention. In addition to the need for further studies, greater

attention needs to be given to improving the early detection of and interventions for depression during standard stroke care.

Excellence: What makes this project exceptional?

For the first time, researchers show that preventive treatment with an antidepressant medication or talk therapy can significantly reduce the risk or delay the start of depression following an acute stroke. These findings differ from past studies attempting to prevent post-stroke depression because the researchers included larger numbers of patients, multi-site enrollment to achieve a more varied sample, and a comparison of both psychological and pharmacological intervention.

Significance: How is this research relevant to older persons, populations and/or an aging society?

The chance of having a stroke approximately doubles for each decade of life after age 55, so a large proportion of stroke patients are elderly. In addition, more than half of all stroke patients develop symptoms of depression. Post-stroke depression has been demonstrated in previous studies to impair recovery in activities of daily living and increased mortality. Thus, depression is a common problem in this population and early detection and intervention for depression, including preventive methods, must be considered important components of post-stroke treatment for older adults.

Effectiveness: What is the impact and/or application of this research to older persons?

Post stroke depression can impede rehabilitation and recovery of functional skills, reduce quality of life, and may also shorten a person's lifespan. While further studies are needed, this research has shown that multiple forms of preventive intervention can be effective in reducing depression and its associated problems during standard stroke care in elderly populations. The researchers specifically chose PST over other forms of talk therapy because it was developed for use in elderly people with depression.

Innovativeness: Why is this exciting or newsworthy?

This is the first study of its kind to show that some cases of post-stroke depression can be preempted with early intervention. In addition to pointing the way toward further studies, the research has demonstrated the value of specific clinical methods in improving the early detection of and interventions for depression during standard stroke care.