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BIPOLAR DISORDERS Factsheet

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What is GABA?

γ -Aminobutyric acid (GABA) is one of the most important inhibitors of neurotransmitters in the central nervous system. GABA is thought to be dysfunctional in people with depression and other affective disorders, with reduced levels found in human postmortem studies. GABA can also be measured via peripheral levels in plasma, via central levels in cerebrospinal fluid, and in particular brain regions using proton magnetic resonance spectroscopy.

What is the evidence for changes in GABA levels in people with bipolar disorder?

Moderate to high quality evidence shows a medium-sized effect of reduced levels of GABA in plasma of people with bipolar disorder during a depression phase when compared to controls without bipolar disorder. Moderate quality evidence also suggests a medium-sized effect of reduced levels of GABA in plasma during a euthymic phase. There were no differences in GABA levels between bipolar disorder and controls when GABA was measured in cerebrospinal fluid or with magnetic resonance spectroscopy.

Compared to people with unipolar depression, people with bipolar depression showed higher GABA levels in cerebrospinal fluid, with no differences in plasma levels.

For more information see the technical table



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NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about bipolar disorder or its treatment with your doctor or other health care provider.

HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at neura.edu.au.