From Molecules to Man (CINP/ASPR Bipolar Disorder Symposium)

B Dean, T Norman

Mental Health Research Institute, Parkville, Victoria, Australia

Overview

Bipolar disorder affects between 2% and 4% of the Australian population and is characterized by mood swings. The symptoms of bipolar disorder show some commonality with schizophrenia and unipolar depression, suggesting that the pathology of bipolar disorder may be an intermediate in a continuum of disease. This symposium will present state-of-the-art information on the current diagnostic definitions of the bipolar disorders, neuroimaging and postmortem central nervous system data seeking to define the pathology of the disorder as well as data from basic research and clinical practice that seek to define the mechanisms and best practices involved in treating the disorders.

03-01

Bipolar disorder – diagnostic and clinical perspectives

G Johnson

Department of Psychiatry, University of Sydney' Director of the Mood Disorders Unit Northside Clinic, Sydney, Australia

Bipolar disorder is characterized by recurrent episodes of mania (bipolar 1) or hypomania (bipolar 2) and depression. Using DSM-IV criteria, prevalence rates are 1%–2%. Epidemiological studies using broader criteria have proposed a bipolar spectrum 'with a prevalence rate of 3%–7%'. Peak age of onset is late adolescence. A gap between onset episode and diagnosis and treatment is common. Hypomania often goes unrecognized or unreported, leading to a misdiagnosis of depression. Substance abuse comorbidity is high and may confound diagnosis. Suicide risk is 20 times the general population rates with a 5:1 ratio of attempts to completed suicides compared with 18:1 in the general population. The past decade has seen significant advances in treatment of bipolar disorder providing a strong evidence base for efficacy. However, 40%–50% of patients report subthreshold symptoms, predominantly depression between illness episodes contributing to the high lifetime rate of functional impairment.

03-02

Imaging studies of bipolar disorder: Are we there yet?

GS Malhi[1,2,3]

[1]Academic Discipline of Psychological Medicine, Northern Clinical School, University of Sydney; [2]Black Dog Institute, Prince of Wales Hospital, Sydney, New South Wales, Australia; and [3]Prince of Wales Medical Research Institute, Sydney, New South Wales, Australia

Neuroimaging research is now a major research domain in the investigation of affective disorders (Haldane & Frangou Acta Neuropsychiatrica 2006, 18 88–99). However, while distinct changes have been identified in schizophrenia and neurodegenerative disorders, markers in mood disorders, in particular in bipolar disorder, are in comparison sparse. Neuroimaging technology affords examination of structure, function and 'process', and has in recent years begun to provide new insights into the pathophysiology of bipolar disorder (Lagopoulos et al. Acta Neuropsychiatrica 2006, 18 100–104). Imaging studies have shown subtle structural changes and interesting functional changes that may have implications for understanding the neuropsychological profile of bipolar disorder and the affective instability experienced by patients. Clinically, patients with bipolar disorder often describe difficulties in negotiating real-world problems and have been shown to have neuropsychological deficits both across mood states and when well. This presentation examines the evidence thus far and discusses how emerging findings inform neurobiological models of the disease.

03-03

The neurobiology of bipolar disorder

E Scarr[1], L Gray[2], A Gibbons[3], B Dean[3]

[1]Centre for Neuroscience, The University of Melbourne, Victoria, Australia; [2]Howard Florey Institute, C/- The University of Melbourne, Victoria, Australia; and [3]The Rebecca L. Cooper Research Laboratories, The Mental Health Research Institute, Victoria, Australia

Although the incidence of bipolar disorder rivals that of schizophrenia, there has been relatively little exploration of the underlying pathology of the disorder using postmortem studies. More recently, however, the focus on bipolar disorder and, therefore, its underlying pathology has intensified, stimulating new areas of research. In part, this may have been triggered by the improved clinical outcomes obtained using atypical

https://doi.org/10.1017/S0924270800031999 Published online by Cambridge University Press