## Are Depression and Bipolar Disorder the Same Illness?

A long-standing scientific controversy with many clinical consequences is whether bipolar and unipolar disorder are the same or separate and distinct illnesses. Two articles in this issue of the *Journal* present findings that address this controversy with new evidence.

Depression has long been viewed as a fundamental human condition. Descriptions of the syndrome of depression are included in the writings of Hippocrates from 2,500 years ago. He attributed melancholic temperament to an excess of black bile emanating from the liver, one of four bodily humors (1). The symptoms of dysphoria, psychomotor retardation, and suicidality are consistent with DSM-IV criteria.

In contrast, the concept of bipolarity as a fundamental human condition is quite new. Although "mania" was mentioned by ancient Greek physicians, including Hippocrates, its description varied widely, with little consistency (2).

In the late 19th and early 20th century, Kraepelin, in Germany, emphasized the distinction between dementia praecox and manic-depressive insanity (3, 4). One source of

this dichotomy was the emphasis on moods versus cognition and will. However, the major rationale for the distinction was a perceived difference in clinical course and outcome. Dementia praecox was characterized by a deteriorating course, whereas mood disorder insanity was characterized by a relapsing course (5). His concept of manic-depressive insanity included both recurrent unipolar and bipolar illness.

"These findings support the separation of bipolar disorder from recurrent unipolar illness."

It was not until 1966 that bipolar disorder was described as separate and distinct in articles by Jules Angst (6), Carlo Perris (7), and Winokur and colleagues (8) in the United States. These articles proposed separate unipolar and bipolar disorders based on difference in genetics, gender, clinical course, and premorbid personality.

The two articles in the current issue of the *Journal* add to the growing literature supporting the distinctness of bipolar disorder. In the article by Fisfalen and colleagues, the authors report that the frequency of illness episodes is highly familial among patients with bipolar disorder compared with recurrent unipolar depression. This finding serves to provide evidence of a genetic difference between bipolar disorder and unipolar disorder.

The article by Frazier and colleagues also addresses the issue of bipolar disorder as a distinct illness with a biological basis. The authors found structural differences in components of the limbic system in prepubertal children with bipolar disorder. Since regulation of mood and basic human drives (e.g., sleep, sex, and appetite) is a function of the limbic system, these structural differences relate to causes of the illness.

A very intriguing finding in the study by Frazier et al. is that of decreased hippocampal volumes in children with bipolar disorder, which has not been reported in adults. This raises the question of whether prepubertal bipolar disorder is somehow different from adolescent- or adult-onset bipolar disorder. Consistent with this is a difference in the presenting clinical practice of mania in children (9). Instead of a euphoric mood, the most frequent mood disturbance is severe irritability, often with accompanying protracted, hostile, and violent temper outbursts (10). During these affective storms, it is nearly impossible to calm the child. This situation tends to be persistent rather than episodic (as is seen more often in adults). At the same time, classic symptoms of mania oc-

cur in these children. These include grandiosity, hypersexuality, increased energy, and decreased need for sleep. It is intriguing to speculate whether these hippocampal imaging differences between children on one hand and adolescents and adults on the other are responsible for the differences in clinical presentation.

## References

- 1. Papadimitriou GN, Dikeos DG, Soldatos CR: The concept of bipolar disorder: a historical perspective, in Handbook of Bipolar Disorder: Diagnosis and Therapeutic Approaches. Edited by Kasper S, Hirschfeld RMA. New York, Marcel Dekker (in press)
- 2. Angst J, Marneros A: Bipolarity from ancient to modern times: conception, birth and rebirth. J Affect Disord 2001; 67:3–19
- 3. Kraepelin E: Psychiatrie, 4. Leipzig, Germany, JA Barth, 1893
- 4. Kraepelin E: Psychiatrie, 5. Leipzig, Germany, JA Barth, 1896
- 5. Angst J: Historical aspects of the dichotomy between manic-depressive disorders and schizophrenia. Schizophr Res 2002; 57:5–13
- 6. Angst J: Zur Aetiologie und Noslogie endogener depressiver Psychosen. Berlin, Springer, 1966
- 7. Perris C: A study of bipolar (manic-depressive) and unipolar recurrent depressive psychoses. Acta Psychiatr Scand 1966; 42(suppl 194):1–189
- 8. Winokur G, Clayton PJ, Reich T: Manic Depressive Illness. St Louis, CV Mosby, 1969
- 9. Biederman J, Mick E, Faraone SV, Spencer T, Wilens TE, Wozniak J: Pediatric mania: a developmental subtype of bipolar disorder? Biol Psychiatry 2000; 48:458–466
- 10. Wozniak J, Biederman J, Richards J: Diagnostic and therapeutic dilemmas in the management of pediatriconset bipolar disorder. J Clin Psychiatry 2001; 62(suppl 14):10–15

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