Comorbidity in BD: The New Priorities

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Medical comorbidity in individuals with bipolar disorder (BD), is associated with an intensification of bipolar depressive symptoms and other indices of bipolar severity, as well as premature mortality. Despite intensified research efforts to unravel pathophysiological factors subserving medical comorbidity, somatic health issues remain underrecognized and suboptimally treated. Individuals with BD should be routinely evaluated for risk factors and laboratory abnormalities associated with medical comorbidity as part of a comprehensive chronic disease management model.

BD is a prevalent and chronic illness associated with substantial morbidity and an increase in all-cause mortality. Clinical, epidemiological and familial comorbidity studies suggest that individuals with BD are differentially affected by several general medical disorders. (e.g., the majority of multiple-episode BD patients have an active medical comorbidity at the time of psychiatric hospitalization). A nascent database suggests that medical comorbidity is associated with several indices of BD severity, quality of life impairment and premature mortality.

Medical comorbidity in BD has important implications for:
- affective illness classification,
- individualizing treatment selection and patient management,
- the configuration of integrated healthcare systems in accordance with best practices,
- health economics and cost modeling, as well as
- translational research.

Although medical comorbidity in the BD population has received less attention when compared to schizophrenia and major depression, the hazards posed by somatic health issues are not dissimilar.

Circulatory disorders

Cardiovascular (CV) disease is the most frequent cause of premature mortality in both developed and developing nations. The association between CV disease and major depressive disorder is firmly established with increasing awareness that CV disease is a frequent cause of premature mortality in individuals with schizophrenia and BDs.

Taken together, the age-adjusted rates of circulatory disorders in BD are significantly higher, with a younger mean age at onset, when compared to the general population. Although hypertension in BD is a prevalent comorbidity, extant evidence suggests that it is not specific to BD and may also differentially affect anxiety disorders and schizophrenia.

The excess mortality in BD is largely attributed to higher rates of circulatory disorders inviting the need for prioritizing aspects of CV health in patient evaluation and management.

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Bipolar Disorder

Obesity
The rising prevalence and dispersion of obesity in North America over the past decade is analogous to a communicable disease epidemic. Longitudinal and cross-sectional associations between major depressive disorder, schizophrenia and obesity are well established. Extant evidence also indicates that an association between BD and obesity exists.

Metabolic disorders
Emerging evidence indicates that the prevalence of Type 2 diabetes mellitus may be increased several-fold amongst BD samples relative to the general population. Moreover, the estimated adjusted prevalence of the Metabolic syndrome has been reported to be increased in individuals with major depressive disorder and schizophrenia.

Respiratory diseases
Individuals with BD are differentially affected by:
• chronic bronchitis,
• asthma and
• chronic obstructive pulmonary disease.
For example, results from the Canadian Community Health Survey (n = 36,984; > 15-years-of-age), a cross-national population-based epidemiological study which evaluated medical comorbidity in persons with mood disorders reported increased rates of asthma (15.9% vs. 8.3%; p < 0.05) and chronic bronchitis (7.9% vs. 3.1%; p < 0.05) amongst individuals with BD relative to the general population.

Migraine
Migraine is more prevalent among persons with BD than in the general population. Migraine comorbidity is associated with several indices of illness severity and possibly harmful dysfunction. The BD/migraine covariation may be more common in bipolar II disorder and bipolar spectrum conditions.

Thyroid Disorders
Disorders of the hypothalamic pituitary thyroid (HPT) axis are more common in individuals with BD when compared to the general population. Rates of hyperthyroidism and hypothyroidism, as well as subclinical alterations in the HPT axis are increased and associated with rapid cycling and diminished treatment responsiveness. Although disturbances in HPT function may be disease-related, iatrogenic factors are well established.

Despite intensified research efforts to unravel pathophysiological factors subserving medical comorbidity, somatic health issues remain underrecognized and suboptimally treated.
Renal insufficiency

Several abnormalities of renal function that are reported in the BD population include:

• diabetes insipidus,
• nephrotic syndrome and
• end-stage renal disease.

Renal pathology in BD is ascribed largely to the nephrotoxic effects of lithium treatment. (See McIntyre, et al for a review of this topic). 18

Infectious diseases

Amongst the BD population, the reported incidence rates for infectious diseases, such as Hepatitis C (2% to 14%) and HIV infection (1% to 3%) are significantly higher than rates reported in the general population. Opportunistic screening for these communicable diseases is warranted in individuals with BD who manifest risk factors. 3,6,19

Summary

Despite the increasingly integrated viewpoint regarding the pathophysiology of BD and several chronic medical disorders, a chasm continues to exist between the coordination of psychiatric and non-psychiatric services. 20 As a result most individuals with BD rarely receive appropriate surveillance, screening and management of comorbid medical disorders.

A comprehensive evaluation of patients with BD should include an assessment of medical and behavioural risk factors associated with BD and medical comorbidity. All patients should be screened for:

• lifestyle habits,
• exercise routine,
• eating patterns,
• comorbid binge eating disorder,
• bulimia nervosa,
• caffeine dependence,
• smoking and
• thyroid dysfunction.

Furthermore, patients should have their baseline weight and BMI measured; waist-to-hip ratio is an optional but recommended measure as it is a reliable proxy of visceral adipose tissue. Baseline blood work should include a screen for components of the Metabolic syndrome, which includes measures of fasting blood glucose and lipid fractionation. 21,22

References:

For additional references, please contact: cme@sta.ca