

P-160 - BIPOLAR DISORDER, MIGRAINE AND EPILEPSY - A SHARED PATHOGENESIS?

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Introduction: Bipolar, migraine and epilepsy disorders are often co-morbid conditions. This link may help explain their pathogenesis, diagnosis and treatment. The more understood mechanisms by which epilepsy and migraine arise may offer new insight into bipolar disorder neurobiology. Here, we examine the prevalence of these disorders in a UK community mental health team. We then report on a wide-ranging literature review highlighting shared features of the conditions and suggest how they may develop along a similar pathway.

Objectives:

- Examine co-morbidity prevalence in Bedford East Community Mental Health Team outpatients.
- Identify overlapping aspects of neurobiology.
- Explain how these may relate to each other.

Aims:

- Add to existing co-morbidity data.
- Offer insight into bipolar neurobiology.

Methods: Manual search of an outpatient database covering January 2010 to February 2011 (n=615), identifying cases of bipolar disorder, migraine and epilepsy.

Results: Diagnoses Prevalence

Bipolar 19.8%

Migraine 5.4%

Epilepsy 1.1%

Bipolar + epilepsy 0.16%; 0.82% of bipolar patients.

Bipolar + migraine 1.1%; 5.7% of bipolar patients.

Conclusions: Contrasting with previous studies, co-morbidity was much lower - likely to reflect under-reporting of secondary diagnoses. Most literature supports a connection between the disorders. Common features exist regarding disease course, pharmacological treatment, altered cellular and loss of network stability.

We discuss the relationship between genes and environment, and hence impact on Metabolic factors, Ion Channels and neurotropic factors, which affect network changes, Hyper-excitability, Cellular vulnerability and Loss of 'stabilising' circuits. We suggest an accumulating pathological change towards disease and we note accompanying Inflammatory/Immune responses.