Titel des Beitrags:
Genome wide association study identifies variants in NBEA associated with migraine in bipolar disorder.

Abstract:
Migraine is a common comorbidity among individuals with bipolar disorder, but the underlying mechanisms for this co-occurrence are poorly understood. The aim of this study was to investigate the genetic background of bipolar patients with and without migraine. We performed a genome-wide association analysis contrasting 460 bipolar migraineurs with 914 bipolar patients without migraine from the Bipolar Genome Study (BiGS). We identified one genome-wide significant association between migraine in bipolar disorder patients and rs1160720, an intronic single nucleotide polymorphism (SNP) in the NBEA gene (P=2.97×10⁻⁸, OR: 1.82, 95% CI: 1.47-2.25), although this was not replicated in a smaller sample of 289 migraine cases. Our study is based on self-reported migraine. NBEA encodes neurobeachin, a scaffolding protein primarily expressed in the brain and involved in trafficking of vesicles containing neurotransmitter receptors. This locus has not previously been implicated in migraine per se. We found no evidence of association in data from the GWAS migraine meta-analysis consortium (n=118,710 participants) suggesting that the association might be specific to migraine co-morbid with bipolar disorder.