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INCREASED SERUM NEUROTROPHIN-4/5 LEVELS IN BIPOLAR DISORDER

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Neurotrophins are central to several aspects of central nervous system function, and emerging evidence links these growth factors to mood disorders. The purpose of this study was to investigate serum neurotrophin-4/5 (NT-4/5) levels in patients with bipolar disorder, both within mood episodes and in euthymia. Patients with bipolar I disorder (n=154) and controls (n=30) had their NT-4/5 serum levels assayed using an ELISA. Levels of NT-4/5 levels were significantly higher in bipolar disorder patients than in controls; NT-4/5 levels were increased in mania, depression and euthymia, but not significantly different between BD mood states. As far as are aware, this is the first study showing NT-4/5 immunocontent alterations in bipolar disorder. A tentative explanation would be that NT-4/5 increases is compensating for ongoing oxidative damage in dopaminergic neurons.