
LETTER TO THE EDITOR

Serotonin Transporter Genotype and Seasonal Variation in Serotonin Function

Nielsen and colleagues (1998) have provided important data on the relationship between cerebrospinal fluid (CSF) 5-hydroxyindoleacetic acid (5-HIAA) and serotonin transporter (HTT = SLC6A4) promoter genotype. They found a trend for higher CSF 5-HIAA levels in subjects with the l/l genotype than in subjects with the l/s and s/s genotypes. They also noted a trend for seasonal variation in CSF 5-HIAA levels in those with the l/l genotype, which appears consistent with our findings on blood serotonin (5HT) levels (Hanna et al 1998). In contrast to a previous report on normal controls (Brewerton et al. 1987), they did not observe a seasonal pattern in CSF 5-HIAA levels in their sample of unrelated Finnish alcoholics and controls.

As they suggest, their lack of replication of our results may be due to differences in subject characteristics and serotonergic measures. Further work may determine whether serotonin transporter (5-HTT) activity has a stronger influence on blood 5-HT content than on CSF 5-HIAA levels. The question of whether the l/l genotype, in particular, is associated with seasonal variation in the 5-HTT may be resolved with further studies of the 5-HTT in both platelet and brain (Little et al. 1998). The advantage of repeat measures of platelet 5-HTT binding or function is that they could be used to assess intra-individual variation over time.

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