

Neuroticism and Anxiety Cross Paths

Neuroticism is a personality trait, while generalized anxiety disorder is a psychiatric diagnosis. Common features, e.g., irritability and worrying, suggest some overlap. To explore the depth of this commonality, Hettema et al. (p. 1581) contrasted the extent of genetic and environmental sources of neuroticism and broadly defined generalized anxiety disorder. Twins in 3,101 male-male, female-female, and male-female monozygotic and dizygotic pairs completed a neuroticism questionnaire and psychiatric interview. Statistical modeling indicated that the genetic factors underlying neuroticism are nearly indistinguishable from those for generalized anxiety disorder. Environmental risk factors, on the other hand, were only modestly correlated. The similarity in genetic influences on neuroticism and generalized anxiety disorder raises the possibility that people with high levels of neuroticism could be a useful starting point in the hunt for genes for generalized anxiety disorder.



Adolf Wölfli, 1864–1930,
Images in Psychiatry (p. 1574)



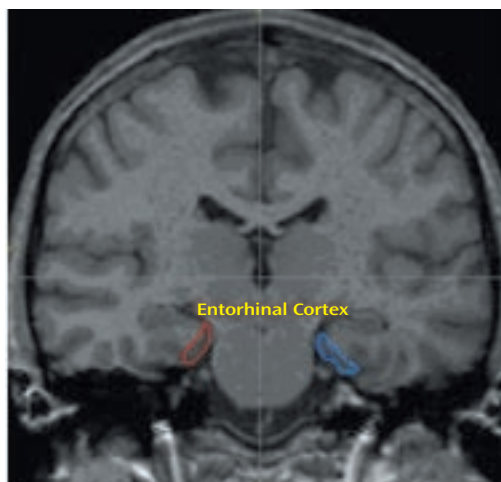
Dopamine D₁/D₂ Balance Unique to Clozapine

Despite the introduction of other “atypical” antipsychotic drugs, clozapine remains the most effective for refractory schizophrenia. Various hypotheses about clozapine’s pharmacological uniqueness have not held up to testing. Clozapine has been shown to have higher affinity for dopamine D₁ receptors and lower affinity for D₂ receptors than typical antipsychotic agents. Now Tauscher et al. (p. 1620) have conducted a similar comparison of clozapine and three other atypical antipsychotics. D₁ occupancy in the

striatum was significantly higher in patients taking clozapine than in those taking risperidone or quetiapine but not olanzapine. D₂ occupancy was lower for clozapine than for risperidone and olanzapine. Most distinctive was clozapine’s nearly equivalent occupancies of D₁ and D₂ receptors; the ratio of D₁ to D₂ was significantly greater than that for any of the other atypicals. This relationship suggests that targeting D₁ receptors and combining such treatment with moderate D₂ antagonism could point toward other new treatments for schizophrenia.

The Entorhinal Cortex and Schizophrenia

Structural abnormalities in the medial temporal lobe of the brain have consistently been associated with schizophrenia. The entorhinal cortex is a key component of the medial temporal lobe and acts as a relay station between the prefrontal cortex and the hippocampus. Measuring it in postmortem studies has been limited by the variation in its cellular architecture. Prasad et al. (p. 1612) measured the volume of the entorhinal cortex in patients with first-episode schizophrenia or other psychoses by using magnetic resonance imaging and an anatomically and cytoarchitecturally validated method of delineation. The left entorhinal cortex was significantly smaller in both the patients with schizophrenia and those with other psychoses than in healthy comparison subjects. Contrary to expectation, the schizophrenia patients’ left and right volumes correlated positively with the score for delusions. The overall smaller entorhinal cortex concurs with postmortem findings and adds to evidence for disrupted brain circuits in schizophrenia.



ADHD and the Teenage Brain

Impaired inhibitory control is a characteristic of attention deficit hyperactivity disorder (ADHD). It has been related to brain abnormalities in children and adults. Findings in adolescents have been inconsistent, possibly because adolescents with full ADHD are not typical; childhood symptoms often decrease with time. Schulz et al. (p. 1650) studied adolescent boys who had received childhood diagnoses of ADHD but varied in current status. These boys were less able to suppress responses to nontarget visual stimuli than were adolescent boys with no ADHD history. During response inhibition, the ADHD group had greater activation of several regions of the prefrontal cortex than did the comparison group. Greater activation also appeared in higher-order anterior cingulate and frontopolar cortical areas and was inversely related to task performance. The involvement of these regions indicates problems in executive processing generally, not just response inhibition.

Real-Life Test of Psychodynamic Therapy

According to psychoanalytic theory, psychotherapy that addresses psychological defense mechanisms should increase adaptability and protect against recurrence of symptoms. This change would be a long-term process and apply to a wide range of patients. Bond et al. (p. 1665) tracked defense styles and symptoms over 3–5 years in a naturalistic study of patients with depressive or anxiety disorders who received dynamic psychotherapy. Many had personality disorders or chronic illnesses, and some took psychotropic medications. Ratings made every 6 months showed overall improvement in defensive functioning. Decreases in two of four defense styles were statistically significant. Distress, depression, and global functioning also improved over time, and the improvement in defensive functioning predicted improvement in these symptom measures. The benefits of psychodynamic psychotherapy, therefore, may extend over many years.