Much controversy remains around the question: How many different types of psychotic illness are there? Applying latent class analysis to detailed assessments of probands with psychotic and affective illness from a population-based psychiatric registry in County Roscommon, Ireland, Kendler et al (page 492) found 6 classes: classic schizophrenia, major depression, schizophreniform disorder, bipolar/schizomania, schizodepression, and hebephrenia. These classes differed on many historical and clinical variables and on the pattern of psychopathology in relatives. These results suggest a relatively complex typology of psychotic syndromes more consistent with the DSM-IV approach than either with a unitary model or with the Kraepelinian dichotomy. A Commentary by Crow and Reply Commentary by Kendler are included.

Panic disorder sufferers are commonly distressed by symptoms, such as heart palpitations, usually attributed to activation of the sympathetic nervous system, a stimulant division of the autonomic nervous system. Epidemiological findings of increased rates of sudden death in panic disorder suggest that such cardiac stimulation may rarely have grave consequences. Wilkinson et al (page 511) report that with patients panic disorder release the stress hormone adrenaline from the heart. Activity of the sympathetic nervous system, while normal at rest, increased during panic attacks. A Commentary by Heninger is included.

Hypotheses about the mechanism of action of light therapy for seasonal affective disorder have focused on serotonergic mechanisms. The role of catecholaminergic pathways has not been fully explored. Neumeister et al (page 524) compared the effects of tryptophan depletion with catecholamine depletion and sham depletion in patients with seasonal affective disorder remitted on light therapy. The antidepressant effects of light therapy were disrupted by both tryptophan depletion and catecholamine depletion. These findings suggest that catecholaminergic pathways are also involved in the mechanism of action of light therapy.

Serotonin reuptake inhibitors (SRIs) are thought to alleviate depression by enhancing brain serotonergic neurotransmission, and also reduce REM sleep. Depletion of brain serotonin via rapid tryptophan depletion has been reported to reverse the antidepressant effects of SRI in depressed patients treated for 4 to 6 weeks. In euthymic patients receiving SRIs for an average of 5 months, Moore et al (page 534) found that tryptophan depletion reversed the SRI-induced changes in REM sleep but did not reverse the antidepressant effects.

Patients with schizophrenia as a group are known to have differences in brain structure but it has been unclear when these differences become apparent. Zipursky et al (page 540) compared the magnetic resonance imaging scans from a large group of patients who presented with a first episode of psychosis to those from a group of healthy volunteers. Patients had smaller gray matter volumes and greater cerebrospinal fluid volumes than the controls. These differences, however, were not as great as have been found in chronically ill patients.

Even when they are appropriately medicated, many psychiatric patients experience periodic relapses. Using meta-analysis, Butzlaff and Hooley (page 547) provide strong evidence for the association between family levels of expressed emotion (EE) and short-term relapse rates in schizophrenia, mood disorders, and eating disorders. Importantly, the effect size of EE was found to be significantly greater for mood and eating disorders than it was for schizophrenia. These findings highlight the importance of psychosocial factors in the course of several different mental disorders and underscore the importance of helping families cope with psychiatric problems in a relative.

Theory suggests that excessive bodily responses to extreme stressors may trigger a cascade of neurobiological transformations that can ultimately lead to posttraumatic stress disorder (PTSD). Shalev et al (page 553) followed 86 persons admitted to an emergency department following traumatic events. Survivors who developed PTSD 4 months later (n = 20) had higher heart rate levels on emergency department admission and 1 week afterwards. The difference was not due to trauma severity. This study demonstrates a link between early physiological responses and subsequent PTSD that may begin to clarify the pathogenesis of the disorder.

Psychotherapy should be part of the treatment plan to overcome suffering and disability associated with a range of illnesses. Guze (page 561) argues that psychotherapy is generally not integrated into overall managed care treatment plans. The managed care model involves serious fragmentation of the overall care of patients. It also perpetuates a Cartesian view of separating mind and body, without evidence that this approach is cost-effective. A Commentary by Michels is included.