Depression: vulnerability, bias and treatment

Aspects of personality and cognitive style, reflected in neuroticism, dysfunctional attitudes and low self-esteem, have been associated with vulnerability to depression. Jones and colleagues (pp. 200–205) examined the relative contribution of these factors specifically in reference to postnatal depression. They found that there were no significant differences in personality and cognitive style between those women suffering from recurrent depressive disorder who did, or did not, have postnatal depression – although they all had lower self-esteem, higher levels of dysfunctional beliefs, such as need for dependence, and higher levels of neuroticism when compared with healthy women. This suggests that the aetiology of postnatal depression may lie in other factors, such as the extensive hormonal changes and role transitions occurring around childbirth. Depressive illness can be effectively treated with antidepressant medication and psychological therapies; meta-analytic studies have demonstrated publication biases in the studies using antidepressant medication – with considerably more positive than negative trials reported and a consequent elevation in the observed effect sizes of these drugs. Cuijpers and colleagues (pp. 173–178) examined studies of the efficacy of psychological treatments for depression, and report evidence for a similar publication bias – which they calculate artificially increases the mean effect size in these studies from 0.42 to 0.67. This is particularly interesting because one oftquoted reason for this bias in drug studies is the perceived role of funding by pharmaceutical companies which, it is argued, depend on positive results for their financial solvency. What would be the similar motivation in psychological studies? The authors consider several possible answers, including personal interests of authors, both financial and professional, and the role of editorial policies and reviewers that may be skewed towards publishing significant positive outcomes over more modest negative ones. They suggest that the use of trial registries for all trials may be the way forward. Electroconvulsive therapy (ECT) is an effective treatment for severe depression; however, its use is restricted through ambivalence about the extent of any adverse effects, and also, more prosaically, about the optimal manner of application – unilateral, bilateral, and temporal or frontal? Kellner and colleagues (pp. 226–234) report the results of the largest ECT study to date, which found that unilateral, bilateral temporal and bilateral frontal electrode placement ECT did not differ significantly in their efficacy, with remission rates of 55%, 64% and 61% respectively. They also did not differ significantly in their cognitive effects. An accompanying editorial by Scott (pp. 171–172) places this study in a historical context, and concludes that the practical lessons are to use bilateral ECT when speed of response is important, and unilateral ECT when minimisation of cognitive effects is important; he also raises a question of his own – why did the ill patients in this study have to wait an average of 2.5 years for such an effective treatment?

Challenges of ADHD and childhood adversity

Despite attention-deficit hyperactivity disorder (ADHD) being one of the most common diagnoses in child and adolescent psychiatric services, the longer-term course of this disorder is unclear. Langley and colleagues (pp. 235–240) found that 70% of adolescents continued to fulfill the ADHD diagnostic criteria at a 5-year follow up. Over this follow-up period they were also struck by the increase in the levels of conduct disorder, police contact and high-risk health-related behaviour. The only predictive factor for outcome was the presence of maternal childhood conduct disorder symptoms. They paint a relatively bleak picture for clinicians treating these patients, and emphasise the need to identify more therapeutic options in the longer term. Childhood adversity is conventionally associated with a range of mental health problems in adult life; Oladeji et al (pp. 186–191) found that this was not generally the case in sub-Saharan Africa, where half of the respondents had suffered adverse childhood experiences. The only exceptions to this were substance use disorders, which were more likely to occur in those exposed to childhood adversity such as neglect, abuse or family violence. The authors suggest that a traditional way of life within an extended family culture may ameliorate adult mental illness, but cannot prevent childhood adversity – especially when growing up in a society where 150 out of 1000 children do not live to the age of 5 years.

Epilepsy, STG and psychosis

Interictal psychosis in epilepsy was traditionally distinguished from schizophrenia by a lack of common aetiological factors, but recent research has suggested otherwise. Adachi and colleagues (pp. 212–216) found that interictal psychosis occurred an average of 14 years after the onset of epilepsy and that this duration was decreased in patients with generalised forms of epilepsy, those with normal intellectual functioning, and a positive family history of psychosis. They propose that this illness may arise as a consequence of vulnerability to psychosis, rather than psychosis occurring as a consequence of epilepsy-related damage. Structural changes in the temporal cortex have been consistently observed in schizophrenia; such changes in the superior temporal gyrus (STG) were also evident in individuals at high risk of developing psychosis. Takahashi et al (pp. 206–211) report that these at-risk individuals had significantly smaller STG; but there was no difference in the patients who went on to develop a full-blown psychotic illness. They note that although these changes are evident in high-risk antipsychotic-naive people, the more marked changes have been observed occurring within the STG during the transition to psychosis – and that this may offer the potential for some focused intervention to protect the STG during this vulnerable time.