

## Highlights of this issue

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### Depression: genes, screening and childhood

Although the nature *v.* nurture debate has been active for some time, there has been a resurgence of interest in the nature–nurture interaction in the aetiology of depressive disorder, initiated by the finding that possessing certain alleles of the serotonin transporter gene (*s/s*) confers a greater risk of depression if combined with exposure to adverse life events. How are people likely to respond when offered the opportunity to know this genotype? Wilhelm *et al* (pp. 404–410) report that two-thirds of their longitudinal sample chose to know their genotype, and offered the explanation that this knowledge might allow for earlier intervention or potential avoidance of some of the triggers for depression. The most common perceived limitations were that insurance companies or employers may discriminate against individuals on the basis of the results, and that being aware of one's higher-risk status might prove stressful or depressing in itself. Once people knew they were in the higher-risk group, they reported greater levels of distress, but 92% were pleased with their decision to find out their genotype. Continuing the environmental theme, Weich and colleagues (pp. 392–398) examined the impact of family relationships in childhood on the likelihood of developing psychiatric disorders in later life. Their review of several longitudinal studies suggests that abusive relationships during childhood are strong predictors of depression, anxiety and post-traumatic stress disorder, and the absence of maternal warmth was associated with suicidal behaviour in adulthood. They highlight the opportunity for interventions at an early stage, to attempt to prevent the long-term harm associated with the most dysfunctional parent–child relationships. Data suggest that up to half of patients suffering from depressive illness are not diagnosed even when seen by their general practitioners. Baas *et al* (pp. 399–403) found that screening for depression in high-risk groups in general practice was largely ineffective; although they were able to identify an increased number of cases through screening, the number of patients opting for treatment was relatively low. The authors speculate about whether this is because of the stigma attached to the label of depression, or a general unwillingness to accept treatment for something that individuals did not themselves present with to their general practitioner.

### Imaging autism and bipolar disorder, and lithium revisited

Autism-spectrum disorder and psychotic illness have been considered mutually exclusive in the past, but the more contemporary view accepts that classical psychotic symptoms can co-occur in autism-spectrum disorder. Toal and colleagues (pp. 418–425) performed magnetic resonance imaging (MRI) on patients with autism-spectrum disorder, divided into those with and without psychotic symptoms, and found reduced grey matter volume in the right insular cortex and bilateral cerebellum in the psychosis group. They examine the possible mechanisms underpinning these changes and suggest that the presence of neurodevelopmental abnormalities normally associated with autism-spectrum disorder may also represent an alternative entry point into a final common

pathway of psychosis. The anterior cingulate gyrus has been suggested to be important in mood disorders, and Fornito *et al* (pp. 426–433) used MRI to examine the anterior cingulate cortex in patients with first-onset bipolar disorder, to clarify earlier inconclusive findings. In males, they reported increased thickness within one region, the subcallosal anterior cingulate cortex, which has been associated with responses to physiological stress. They suggest that relative hypertrophy in this, and other regions associated with the hypothalamic–pituitary–adrenal axis, may be associated with an elevated stress response related to the onset of psychosis; but chronic hyperactivity may result in later volumetric reductions as the illness becomes more chronic. Their results remained unchanged even when they excluded patients treated with lithium, which has previously been associated with grey matter increases. There is an intriguing short report suggesting the benefits of having lithium in the drinking water. Ohgami *et al* (pp. 464–465) show that higher levels of lithium in the drinking water were associated with lower levels of suicidality within several regions in Japan. Young (p. 466), in a commentary on this report, suggests that this may be a useful stimulus to re-examine the anti-suicidal effects of lithium, with a renewed focus on the mechanism by which lithium exerts its effects in the brain.

### Psychosis: cognition, metabolism and early intervention

Although initially, much was made of the superiority of the second-generation antipsychotics in treating cognitive and affective aspects of psychotic illness, more recently this has been viewed more sceptically. Cuesta *et al* (pp. 439–445) examined the effects of treatment with risperidone and olanzapine in patients with first-onset psychosis and reported that there was no difference between groups treated with these antipsychotics, or those who had subsequently received treatment with another antipsychotic, and perhaps most strikingly, no difference when compared with a group who were no longer receiving any treatment. However, all the groups showed improvement from baseline, while the actual improvement was closely associated with their level of baseline function. The authors conclude that any improvement in cognition may occur early in the course of treatment, and persist over subsequent months, even in the absence of further ongoing treatment. In a similar vein, there is considerable concern over the metabolic side-effects of the newer antipsychotic medications and it has proved difficult to disentangle disease-related from iatrogenic effects. Fernandez-Egea *et al* (pp. 434–438) report that patients with psychotic illness are more likely to have an abnormal glucose tolerance even before commencing treatment with antipsychotic medication. They also found higher levels of inflammatory markers in untreated psychosis and consider the possibility of common risk factors between diabetes and schizophrenia. Early intervention services for psychosis have been introduced in the UK to a mixed response. Lester and colleagues (pp. 446–450) found their benefits to include high levels of engagement with patients, and people involved expressing a high level of satisfaction with the service. However, they also highlight the tensions inherent in meeting performance targets related to case-load, and balancing development strategies and family support roles, and emphasise the importance of the stability afforded through having secure funding for the future.