



Snips from the journals

Update on depression and deliberate self harm

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An update on the role of glutamate in the pathophysiology of depression

Aims

To review the literature on the involvement of glutamate (Glu), including its interactions with other neurochemical systems, in the pathophysiology of depression.

Method

A MEDLINE search using the terms glutamate, depression and major depressive disorder, was performed.

Results

Alterations in proteins involved in glutamatergic signalling are implicated in variations in behaviour in animal models of depression. Drugs acting at Glu receptors appear to have antidepressant-like effects in these models, and traditional antidepressant pharmacotherapies act on the glutamatergic system. Recent evidence from genetic studies and in vivo spectroscopy also correlate glutamatergic dysfunction with depression. Trials of N-methyl-D-aspartate receptor antagonists in humans have provided mixed results.

Conclusions

A growing body of evidence indicates that the glutamatergic system is involved in the pathophysiology of depression, and may represent a target for intervention.

Mitchell ND, Baker GB. An update on the role of glutamate in the pathophysiology of depression. Acta Psychiatr Scand. 2010; 122(3):192-210

Little evidence for different phenomenology in poststroke depression

Aims

It remains unclear whether mood depressive disorders after stroke have a distinct phenomenology. We evaluated the symptom profile of poststroke depression (PSD) and assessed whether somatic symptoms were reported disproportionately by stroke patients.

Method

The sample was 149 stroke patients at 18 months poststroke and 745 age- and sex-matched general population controls. A comprehensive psychiatric interview was undertaken and depression was diagnosed according to DSM-III-R criteria.

Results

Depressed controls reported more 'inability to feel' ($P = 0.002$) and 'disturbed sleep' ($P = 0.008$) than depressed stroke patients. Factor analysis of the 10 depressive symptoms identified two main factors, which appeared to represent somatic and psychological symptoms. There was no difference in scores on these two factors between stroke patients and controls.

Conclusions

Phenomenology of depression at 18 months poststroke is broadly similar but not the same as that described by controls. Somatic symptoms of depression were not over-reported by stroke patients

Cumming TB, Churilov L, Skoog I, Blomstrand C, Linden T. Little evidence for different phenomenology in poststroke depression. Acta Psychiatr Scand. 2010 121(6):424-30. Epub 2010 Apr 8.

Treatment of Resistant Depression in Adolescents (TORDIA): week 24 outcomes

Aims

The purpose of this study was to report on the outcome of participants in the Treatment of Resistant Depression in Adolescents (TORDIA) trial after 24 weeks of treatment, including remission and relapse rates and predictors of treatment outcome.

Method

Adolescents (ages 12-18 years) with selective serotonin reuptake inhibitor (SSRI)-resistant depression were randomly assigned to either a medication switch alone (alternate SSRI or venlafaxine) or a medication switch plus cognitive-behavioral therapy (CBT). At week 12, responders could continue in their assigned treatment arm and nonresponders received open treatment (medication and/or CBT) for 12 more weeks (24 weeks total). The primary outcomes were remission and relapse, defined by the Adolescent Longitudinal Interval Follow-Up Evaluation as rated by an independent evaluator.

Results

Of 334 adolescents enrolled in the study, 38.9% achieved remission by 24 weeks, and initial treatment assignment did not affect rates of remission. Likelihood of remission was much higher (61.6% versus 18.3%) and time to remission was much faster among those who had already demonstrated clinical response by week 12. Remission was also higher among those with lower baseline depression, hopelessness, and self-reported anxiety. At week 12, lower depression, hopelessness, anxiety, suicidal ideation, family conflict, and absence of comorbid dysthymia, anxiety, and drug/alcohol use and impairment also predicted remission. Of those who responded by week 12, 19.6% had a relapse of depression by week 24.

Conclusions

Continued treatment for depression among treatment-resistant adolescents results in remission in approximately one-third of patients, similar to adults. Eventual remission is evident within the first 6 weeks in many, suggesting that earlier intervention among nonresponders could be important.

Emslie GJ, Mayes T, Porta G, Vitiello B, Clarke G, Wagner KD, Asarnow JR, Spirito A, Birmaher B, Ryan N, Kennard B, DeBar L, McCracken J, Strober M, Onorato M, Zelazny J, Keller M, Iyengar S, Brent D. Treatment of Resistant Depression in Adolescents (TORDIA): week 24 outcomes. Am J Psychiatry. 2010 Jul;167(7):782-91. Epub 2010 May 17.

Symptoms of anxiety and depression in adolescent students; a perspective from Sri Lanka

Background

Sri Lanka recorded an extraordinary high suicide rate for adolescents aged 15 - 19 in the early 1990s (46.5/100,000). With this in perspective, the Ministry of Health in Sri Lanka recommends school programmes for adolescents by mental health units of local hospitals.

Method

We conducted cross sectional surveys to screen for symptoms of anxiety and depression among students aged 14 - 18 during school mental health programmes. Two schools were randomly selected within the Ratnapura municipality (urban population of approx. 50,000), Sri Lanka and all students aged 14-18 were assessed with self administered (pre tested, Sinhalese translations) questionnaires [Center for epidemiologic studies depression scale, Anxiety screening test of suicide and mental health association international].

Results

A total of 445 students were assessed (male-54.4%, female 45.6%). Thirty six percent screened positive for depression (mild depression-17%, severe depression-19%) and 28% screened positive for severe anxiety. Females screened positive for depression and

anxiety significantly more than the males ($p = 0.0001$, 0.005 respectively). Students in classes facing barrier examinations at the end of the year had the highest positivity rates. Examination related issues (36%) were the most commonly cited problem.

Recommendations

It is recommended that: 1. School mental health development programmes in Sri Lanka concentrate more on reducing examination related stress, and in particular focus on the female students. 2. Policy decisions are made to reduce competition for higher education. 3. A nationally coordinated survey on mental health of adolescent students is carried out utilizing the island-wide network of medical officers of mental health

Rodrigo C, Welgama S, Gurusinghe J, Wijeratne T, Jayananda G, Rajapakse S Symptoms of anxiety and depression in adolescent students; a perspective from Sri Lanka. Child Adolesc Psychiatry Ment Health. 2010 Mar 24;4:10.

Genetic and environmental contributions to depression in Sri Lanka

Background

Susceptibility to depression results from genetic and non-familially shared environmental influences in high-income, Western countries. Environments may play a different role for populations in different contexts.

Aims

To examine heritability of depression in the first large, population-based twin study in a low-income country.

Method

Lifetime depression and a broader measure of depression susceptibility (D-probe) were assessed in 3908 adult twins in Sri Lanka (the CoTASS study).

Results

There were gender differences for the broad definition (D-probe), with a higher genetic contribution in females (61%) than males (4%). Results were similar for depression, but the prevalence was too low to estimate heritability for males.

Conclusions

Genetic influences on depression in women appear to be at least as strong in this Sri Lankan sample as in higher-income countries. Conclusions are less clear for men but suggest a larger role for environments rather than genes. The nature as well as the magnitude of environmental influences may also differ across populations.

Ball HA, Sumathipala A, Siribaddana SH, Kovas Y, Glozier N, McGuffin P, Hotopf M. Genetic and environmental contributions to depression in Sri Lanka. Br J Psychiatry. 2009 Dec;195(6):504-9

Incidence and predictors of suicide attempts in DSM-IV major depressive disorder: a five-year prospective study

Objective

Prospective long-term studies of risk factors for suicide attempts among patients with major depressive disorder have not investigated the course of illness and state at the time of the act. Therefore, the importance of state factors, particularly time spent in risk states, for overall risk remains unknown.

Method

In the Vantaa Depression Study, a longitudinal 5-year evaluation of psychiatric patients with major depressive disorder, prospective information on 249 patients (92.6%) was available. Time spent in depressive states and the timing of suicide attempts were investigated with life charts.

Results

During the follow-up assessment period, there were 106 suicide attempts per 1,018 patient-years. The incidence rate per 1,000 patient-years during major depressive episodes was 21-fold (N=332 [95% confidence interval [CI]=258.6-419.2]), and it was fourfold during partial remission (N=62 [95% CI=34.6-92.4]) compared with full remission (N=16 [95% CI=11.2-40.2]). In the Cox proportional hazards model, suicide attempts were predicted by the months spent in a major depressive episode (hazard ratio=7.74 [95% CI=3.40-17.6]) or in partial remission (hazard ratio=4.20 [95% CI=1.71-10.3]), history of suicide attempts (hazard ratio=4.39 [95% CI=1.78-10.8]), age (hazard ratio=0.94 [95% CI=0.91-0.98]), lack of a partner (hazard ratio=2.33 [95% CI=0.97-5.56]), and low perceived social support (hazard ratio=3.57 [95% CI=1.09-11.1]). The adjusted population attributable fraction of the time spent depressed for suicide attempts was 78%.

Conclusions

Among patients with major depressive disorder, incidence of suicide attempts varies markedly depending on the level of depression, being highest during major depressive episodes. Although previous attempts and poor social support also indicate risk, the time spent depressed is likely the major factor determining overall long-term risk.

Holma KM, Melartin TK, Haukka J, Holma IA, Sokero TP, Isometsä ET. Incidence and predictors of suicide attempts in DSM-IV major depressive disorder: a five-year prospective study. Am J Psychiatry. 2010 Jul;167(7):801-8. Epub 2010 May 17.

Postcard intervention for repeat self-harm randomised controlled trial

Background

Self-harm and suicidal behaviour are common reasons for emergency department presentation. Those who present with self-harm have an elevated risk of further suicidal behaviour and death.

Aims

To examine whether a postcard intervention reduces self-harm re-presentations in individuals presenting to the emergency department.

Method

Randomised controlled trial conducted in Christchurch, New Zealand. The intervention consisted of six postcards mailed during the 12 months following an index emergency department attendance for self-harm. Outcome measures were the proportion of participants re-presenting with self-harm and the number of re-presentations for self-harm in the 12 months following the initial presentation.

Results

After adjustment for prior self-harm, there were no significant differences between the control and intervention groups in the proportion of participants re-presenting with self-harm or in the total number of re-presentations for self-harm.

Conclusions

The postcard intervention did not reduce further self-harm. Together with previous results this finding suggests that the postcard intervention may be effective only for selected subgroups

Beautrais AL, Gibb SJ, Faulkner A, Fergusson DM, Mulder RT. Postcard intervention for repeat self-harm: randomised controlled trial. Br J Psychiatry. 2010 Jul;197(1):55-60.

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