Medication alone insufficient for depression related to traumatic head injury

Toronto, ON (October 30, 2008) – In a large clinical sample of patients with traumatic brain injury with symptoms of major depression, antidepressant medication has been shown to lead to remission of symptoms in a minority of patients.

“Although citalopram treatment was associated with a statistically significant reduction in depressive symptoms, the results of this study show the response rate in the present sample is substantially lower than previously reported in past research,” says Dr. Mark Rapoport, lead investigator of the study and geriatric psychiatrist at Sunnybrook Health Sciences Centre. “Our findings suggest that other multidisciplinary treatment modalities will be needed to achieve adequate control of depressive symptoms following traumatic brain injury (TBI).”

The goal of the study was to examine the rates of response and remission in patients treated with a selective serotonin reuptake inhibitor (SSRI), citalopram in this case, for major depression following TBI. In the past, open-label studies of SSRIs have shown statistically significant reductions on depression, but methodological problems in the studies and the small samples limited the ability to interpret the results. Therefore the goal of this study was to assess the response of patients in a larger sample of clinical patients with mild-to-moderate TBI.

Published in the November 2008 issue of the *Journal of Psychopharmacology*, this is the largest study of an SSRI for the treatment of major depression following TBI.

Sixty-five patients attending a mild-to-moderate TBI clinic at a trauma care centre participated in the study. Mild TBI was defined as a loss of consciousness at the time of the injury of 20 minutes or less, an initial Glasgow Coma Score (GCS) of 13-15, a post-traumatic amnesia (PTA) of less than 24 hours and a normal CT brain image. Moderate-to-severe TBI was defined as a GCS of less than 13, a PTA greater than 24 hours or an abnormal CT brain image. The study excluded any subjects with prior focal brain disease such as a stroke or tumor, any significant acute medical illness, alcohol abuse, CT abnormalities inconsistent with TBI, current antidepressant treatment, contraindications to citalopram, or a premorbid diagnosis of schizophrenia, bipolar disorder or dementia.

The results showed the rate of remission was very similar after six and ten week trial periods (24 per cent and 27 per cent respectively), however the fact that four patients who had responded at six weeks were worse when reassessed at 10 weeks highlights the importance of a longer study period to allow for a more accurate determination of antidepressant response in the long term. Furthermore, at 10 weeks, the rate of response (defined as a 50 per cent reduction in depression scores) was 46 per cent, and the rate of clinician-rated improvement was 56.5 per cent.

Major depression is a complication seen in about one-third of patients within the first year of a TBI and when present, is associated with poor psychosocial functioning and persisting post-concussive symptoms. Major depression is associated with substantial psychosocial dysfunction and post-concussive symptomatology following traumatic brain injury.

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