



Editorial

Depression in tension-type headache sufferers: bystander or villain?

The relation between depression and headache is complex. In clinical practice depressive mood is frequently encountered in patients with frequent headaches, including tension-type headache (TTH), but overt major depression is rather rare. In a cohort of subjects with TTH of any severity the incidence of depression was not increased (Merikangas et al., 1994). There is a bidirectional relationship in lifetime prevalence between migraine and major depression, suggesting a shared cause. Severe non-migrainous headaches (most of which were frequent tension-type headaches), however, were not predicted by major depression, while they were themselves predictive of first-onset major depression (Breslau et al., 2000). It was therefore felt by some that depression was merely a secondary phenomenon in disabling TTH, the more so that such headaches can be ameliorated by tricyclics at low doses supposed to have little or no antidepressant effect.

The study by Janke et al. (2004) in this issue is of paramount importance for this discussion as it shows for the first time that major depression favours the occurrence of stress-induced headache in subjects suffering from frequent TTH and that this is associated with increased pericranial palpation tenderness. Pressure-pain thresholds were also decreased at an extracephalic site in the depressed TTH sufferers. The neurobiological mechanisms through which depression promotes TTH are likely to be central sensitisation and dysfunctioning of descending pain control pathways. It cannot be concluded from the study whether depression per se or increased stress in the depressed subjects are responsible for the observed changes. From findings with brain stem reflexes we have previously hypothesised that the limbic control of descending pain control systems might be abnormal in chronic TTH patients (Schoenen, 1990).

Fortunately for our PhD students, the study by Janke et al. (2004) does not answer all questions. For instance, they were not able to recruit depressed subjects with less than 12 headaches per year, which by itself suggests that depression may cause TTH, but leaves open the question whether depression is able to favour TTH by itself. Although the study convincingly shows that depression predisposes to stress-induced headache episodes, it does not prove that it is the major culprit in frequent or chronic TTH. It could only be an aggravating factor like for instance

hormonal changes in the perimenstrum (which was not taken into account in the present study). The fact that specific serotonin reuptake blockers, though effective antidepressants, are not useful for chronic TTH (Schoenen, 2000) would not favour a primary pathogenic role for depression. The subjects recruited by Janke et al. (2004) had major depression which is not the rule in clinical samples of TTH patients. It would be interesting to know whether depressive mood (scores <18 on Beck's inventory) also increases onset of TTH following laboratory stress. Finally, considering the abovementioned bidirectional relationship between migraine and depression, it seems worthwhile to perform a similar study in migraineurs in order to determine if depression favours migraine attacks or certain interval headaches which can be indistinguishable from TTH.

In summary, despite its limitations this study is a milestone in headache research as it provides experimental evidence that depression may be the villain in tension-type headache, and not just a bystander.

References

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J. Schoenen

*Departments of Neuroanatomy and Neurology,
University of Liege, 20,
rue de Pitteurs, B-4020, Liege, Belgium*

Tel.: 43665191; fax: 43665173.

E-mail address: jschoenen@ulg.ac.be