Brain Volume in Depression

To the Editor: In their excellent article in the May 2012 issue of the *Journal*,[1] Phillips et al demonstrated brain-volume increase in patients with treatment-resistant unipolar depression in sustained remission.

Similar to previous studies in this area,[2–4] no mention was made regarding the nature of brain volume decrease in depression. Is the brain volume increase in remitted patients in this study the function of regeneration of atrophied neurons or of increase in the number of glial cells, or both, in the affected area of the brain?

Also, no mention was made concerning the status of cortisol hypersecretion in nonremitting depressed patients. It would be helpful to learn whether a correlation exists between positive dexamethasone suppression test status and brain atrophy in nonremitted depression.

References

1. Phillips JL, Batten LA, Aldosary F, et al. Brain-volume increase with sustained remission in patients with treatment-resistant unipolar depression. *J Clin Psychiatry*. 2012;73(5):625–631.
2. Sheline YI, Sanghavi M, Mintun MA, et al. Depression duration but not age predicts hippocampal volume loss in medically healthy women with recurrent major depression. *J Neurosci*. 1999;19(12):5034–5043.
3. Hoschl C, Hajek T. Hippocampal damage mediated by corticosteroids—a neuropsychiatry research challenge. *Eur Arch Psychiatry Clin Neurosci*. 2011;251(s2):81–88.
4. Sheline YI, Wang PW, Gado MH, et al. Hippocampal atrophy in recurrent major depression. *Proc Natl Acad Sci U S A*. 1996;93(9):3908–3913.

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