



In response to comments made in “S100B protein and chronic subdural hematoma”

Eric Peter Thelin^{1*}, Malin Elisabet Persson² and Bo-Michael Bellander¹

¹ Department of Clinical Neuroscience, Section for Neurosurgery, Karolinska Institutet, Stockholm, Sweden

² School of Medicine, The University of Manchester, Manchester, UK

*Correspondence: thelin.eric@gmail.com

Edited by:

Bryan G. Young, London Health Science Center, Canada

A commentary on

S-100B protein and chronic subdural hematoma

by Gelabert-González M., Aran-Echabe E., and Serramito-García R. (2013) *Front. Neurol.* 4:24. doi: 10.3389/fneur.2013.00024

We recently published the paper; “Case Report: Extreme Levels of Serum S100B in a Patient with Chronic Subdural Hematoma” (Persson et al., 2012), in *Frontiers in Neurology*. It was a case report concerning a patient with a subdural mass, neurological deterioration, and unusually high S100B levels in serum. Further clinical examination proved that the patient was suffering from a malignant melanoma.

We fully agree with Drs Gelabert-González, Aran-Echabe, and Serramito-García in their manuscript “S-100 B protein and chronic subdural hematoma” that patients presenting chronic subdural hematomas do not normally benefit from biomarker (S100B and NSE) monitoring (Gelabert-González et al., 2013).

In the present case the patient was admitted to the neurosurgical intensive care unit unconscious, GCS 3, and presenting a dilated pupil. The admission CT showed a subdural mass with severe midline shift.

The biomarker S100B is used frequently in our NICU to monitor comatose patients and in this case the level was significantly increased. Although the CT findings indicated that the patient was suffering from a chronic subdural hematoma, it later on was found to harbor metastatic growth from an initially unknown recurrence of a malignant melanoma.

Patients suffering from malignant melanomas might present “false” high S100B levels after traumatic brain injury which has to be considered when there seems to be a discrepancy between clinical findings and the serum level of S100B.

The title was chosen because of the initial confusion concerning CT findings and neurology, and is kept to illustrate the complexity of this case.

In the article, as is proposed by the authors Gelabert-González, Aran-Echabe, and Serramito-García, we never suggest that

S100B is an important marker for chronic subdural hematoma. Instead we highlight the potential influence of other, non-gliar sources of S100B that could affect diagnosis and clinical decision-making of patients in the neurointensive care unit.

REFERENCES

- Gelabert-González, M., Aran-Echabe, E., and Serramito-García, R. (2013). S-100B protein and chronic subdural hematoma. *Front. Neurol.* 4:24. doi: 10.3389/fneur.2013.00024
- Persson, M. E., Thelin, E. P., and Bellander, B. M. (2012). Case report: extreme levels of serum S-100B in a patient with chronic subdural hematoma. *Front. Neurol.* 3:170. doi: 10.3389/fneur.2012.00170

Received: 12 February 2013; accepted: 02 March 2013; published online: 15 March 2013.

Citation: Thelin EP, Persson ME and Bellander B-M (2013) In response to comments made in “S100B protein and chronic subdural hematoma”. *Front. Neurol.* 4:26. doi: 10.3389/fneur.2013.00026

This article was submitted to *Frontiers in Neurocritical and Neurohospitalist Care*, a specialty of *Frontiers in Neurology*. Copyright © 2013 Thelin, Persson and Bellander. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in other forums, provided the original authors and source are credited and subject to any copyright notices concerning any third-party graphics etc.