

# [S-100b protein and chronic subdural hematoma](https://assignbuster.com/s-100b-protein-and-chronic-subdural-hematoma/)

[Health & Medicine](https://assignbuster.com/essay-subjects/health-n-medicine/)

A commentary on

[Case report: extreme levels of serum S-100B in a patient with chronic subdural hematoma](http://www.frontiersin.org/Neurocritical_and_Neurohospitalist_Care/10.3389/fneur.2012.00170/abstract)
*by Persson M. E., Thelin E. P., and Bellander B. M. (2012) Front. Neurol. 3: 170. doi: 10. 3389/fneur. 2012. 00170*

We are surprised by the conclusions of a recent paper by [Persson et al. (2012)](#B4) , “ Case report: extreme levels of serum S-100B in a patient with chronic subdural hematoma,” which suggest that S-100B protein is an important marker for chronic subdural hematoma (CSDH). In our opinion, and that of other authors, S-100B is a significant marker of multiple neurological pathologies.

Chronic subdural hematoma is a relatively common complication, especially among the elderly, where the incidence is estimated as 7. 4/100, 000. Two circumstances account for its high incidence among the elderly; the extensive brain atrophy often found in the elderly or alcoholics, and long-term use anticoagulant ( [Gelabert et al., 2001](#B1) ). CSDH in patients less than 50 years old is rare, and when it does occur it usually points to a predisposing factor, as in this case, where a brain metastasis led to the formation of a hematoma ( [Gelabert-González et al., 2012](#B2) ).

Moreover, while the radiological image of the patient in their study shows a hematoma, it is of small and therefore leads one to question how this can be responsible for such a midline shift. This suggests that something more must be involved, as was revealed at autopsy where a metastases was identified.

In a recent paper, [Kruijff and Hoekstra (2012)](#B3) state that the protein S-100B is probably the best biomarker for melanoma, having potential to identify high-risk stage III melanoma patients who may benefit from adjuvant systematic treatment. Since an effective (adjuvant) therapy for loco-regional metastatic and disseminated melanoma has only been recently introduced, the diagnostic of S-100B, they argue, is set to increase in the near future.

It therefore appears inappropriate to consider differential levels of S-100B as indicative of the evolution of CSH, as suggested by the paper’s title, since they can be more indicative of a melanoma and its metastasis.

## References

Gelabert, M., López, E., and Fernández, J. M. (2001). Chronic subdural hematoma treated by burr holes and closed drainage system: a review of 630 cases. *Med. Principles Pract.* 10, 41–47.

[CrossRef Full Text](http://dx.doi.org/10.1159/000050338)

Gelabert-González, M., Frieiro-Dantas, C., Serramito-García, R., Díaz-Cabanas, L., Aran-Echabe, E., Rico-Cotelo, M., et al. (2012). Chronic subdural hematoma in young patients. *Neurocirugia (Astur.)* pii: S1130–S1473(12)00156-X. doi: 10. 1016/j. neucir. 2012. 08. 002

[CrossRef Full Text](http://dx.doi.org/10.1016/j.neucir.2012.08.002)

Kruijff, S., and Hoekstra, H. J. (2012). The current status of S-100B as a biomarker in melanoma. *Eur. J. Surg. Oncol.* 38, 281–285.

[Pubmed Abstract](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=ShowDetailView&TermToSearch=22240030) | [Pubmed Full Text](http://eutils.ncbi.nlm.nih.gov/entrez/eutils/elink.fcgi?db=pubmed&cmd=prlinks&retmode=ref&id=22240030) | [CrossRef Full Text](http://dx.doi.org/10.1016/j.ejso.2011.12.005)

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

[Pubmed Abstract](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=ShowDetailView&TermToSearch=23227020) | [Pubmed Full Text](http://eutils.ncbi.nlm.nih.gov/entrez/eutils/elink.fcgi?db=pubmed&cmd=prlinks&retmode=ref&id=23227020) | [CrossRef Full Text](http://dx.doi.org/10.3389/fneur.2012.00170)