

Commentary

The authors of this paper have investigated the variation of serum glucose and lipid levels in stroke and emphasized that hyperglycemia reflects the elevated neuron-specific enolase (NSE) values, and outcome of the patients with stroke. This study is a well-planned research, but the diabetes cases should have been excluded from the study because in these patients blood glucose levels are variable and hyperglycemia may occur due to diabetes mellitus.

Serum NSE is a useful and reliable marker, elevated in 24-72 h after brain damage, and it is associated with short-time outcome in both children and in adults with brain damage.^[1-4] Serum NSE assays have high specificity and positive predictive value.^[1] However, many biochemical changes besides NSE, such as hyperglycemia, hyperlipidemia, leucocytosis, thrombocytosis, etc. may

be observed in brain damage.^[5,6] These changes are due to metabolic stress, and also may occur with the reasons other than brain damage. Hyperglycemia and the other stress subjects reflect to metabolic stress, and are not specific for stroke. Therefore specific markers such as NSE should be preferred for outcome and the follow up of the patients with stroke; however, hyperglycemia is an important finding because it may be warning for brain damage.

Coskun Celtik and Yasemin Karal

*Trakya University, Faculty of Medicine,
Edirne, Turkey.*

Address for Correspondence:

Dr. Coskun Celtik, Department of Pediatrics, Faculty of Medicine,
Trakya University, TR22030 Edirne, Turkey.
E-mail: cceltik2001@yahoo.com

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