Serum albumin levels in acute stroke: Correlation with clinical outcome.

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Introduction: Lower levels of albumin is related to worse prognosis of stroke. Also evidence has shown that albumin therapy reduces mortality after stroke. Since there are so much discrepancy on the association between serum albumin levels and stroke outcome. This study was carried out to investigate the association of serum albumin levels with clinical outcome in acute stroke.

Methods: In current case control study, 300 stroked patients aged (71.2 ± 10.8 years of both sexes entered the study consecutively) are involved. Serum albumin levels were estimated by colorimetric assay within 24h after stroke and follow-up interviews were conducted at 2 months post-event to determine stroke outcome. The association between serum albumin levels and stroke outcome was evaluated by Chi-Square Test (SPSS software 22).

Results: Low levels of albumin were significantly associated with poor outcome (score of > 3 on the modified Rankin Scale). The adjusted odds ratio was 0.522 (95% confidence interval, 0.204 - 1.336; $P < 0.05$). The recurrence of stroke and death rate also was high in patients with low levels of albumin compared with patients with elevated levels of albumin. The reduced levels of serum albumin were significantly associated with poor outcome in the stroke.

Conclusions: low levels of albumin in our study were found to be significantly associated with a negative outcome in acute stroke. So it seems that the levels of serum albumin can be predict of stroke outcome.

Stroke, albumin, **clinical outcome**,

1. Phillips A, Shaper AG, Whincup P. Association between serum albumin and mortality from cardiovascular disease, cancer, and other causes. The Lancet. 1989;334(8677):1434-6.
2. Dziedzic T, Slowik A, Szczudlik A. Serum albumin level as a predictor of ischemic stroke outcome. Stroke. 2004;35(6):e156-e8.
3. Babu MS, Kaul S, Dadheech S, Rajeshwar K, Jyothy A, Munshi A. Serum albumin levels in ischemic stroke and its subtypes: Correlation with clinical outcome. Nutrition. 2013;29(6):872-5.



Biography

Salman varmaghani biochemist and researcher in the field of stroke. Evaluation of serum levels of inflammatory markers with proposals in this area has been able to do remarkable help in achieving the goals of science.

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