Abstract

Objective: The aim of this study was to investigate whether hypoalbuminemia and other risk factors for mortality after stroke have the same or different short (1 month), medium (3 months), long (1 year) or very long term (5 years) prognostic value.

Subjects/methods: clinical and analytical data from 254 patients admitted to our Hospital with an ischemic stroke and followed up prospectively for 2 years were collected with a prospective standard protocol. Additional data up to 5 years were obtained from Clinical and Laboratory Registries of the Hospital, a mailed questionnaire, a phone call and the Council Registry of Mortality. Risk factors for mortality at different time points were calculated with logistic regression and Cox proportional hazard analyses.

Results: The following factors were significantly associated with mortality at one month: cardioembolic mechanism, hypoalbuminemia, glycemia, age, low diastolic arterial pressure and Canadian Scale, at three months: previous stroke and Barthel index at discharge, at one year: previous dementia and Barthel index at three months and at five years: age, Canadian Scale score at discharge and low cholesterol at admission. Cox regression analysis considering survival time showed hypoalbuminemia at admission (hazard ratio (HR) 2; p = 0.03), age (HR 1.06; p < 0.00), previous dementia (HR 2; p < 0.00), cardioembolic mechanism (HR 2; p < 0.00) and severity on the Canadian Neurological Stroke Scale (HR 1.2; p < 0.00) to be independently associated with mortality.

Conclusion: Mortality after ischemic stroke seems to depend on different factors along time. Hypoalbuminemia at admission is an independent factor for short term (acute) and global mortality. Other risk factors for global mortality were previous dementia, cardioembolic mechanism and severity on the Canadian Neurological Stroke Scale at admittance.

Keywords