<u>Prognostic Factors Affecting the Clinical Course and short term outcome of</u> Acute Ischemic Stroke Patients Receiving Thrombolytic Therapy.

Abstract

Introduction: There is limited data on prognostic factors of acute ischemic stroke (AIS) treated with thrombolytic therapy

Aim of the study: This study aimed to illustrate the prognostic parameters of AIS individuals received intravenous recombinant tissue plasminogen activator (IV rt-PA).

Subjects and Methods: Forty-five AIS patients eligible for receiving IV rt-PA underwent a complete neurological examination, CT brain, extra-cranial carotid duplex, stroke severity utilizing National Institutes of Health Stroke Scale (NIHSS), disability evaluation using modified Rankin Scale(mRS) 3 months post-stroke and routine lab tests.

Results: Eighteen patients (40%) had unfavorable outcome (mRS > 2), while 27 patients (60%) had favorable outcomes (mRS 0-2). unfavorable outcome was observed among patients with abnormal mean common carotid intima-media thickness (CIMT > 8 mm), dyslipidemia, obesity, old age, diabetes mellitus (DM), and increased NIHSS score at admission and 24 h after IV rt-PA. while, a favorable outcome was identified in patients with hypertension and atrial fibrillation(AF). DM, common CIMT And NIHSS at admission and 24 h following IV rt-PA were all significant independent predictors of functional outcome at three months post-stroke according to multivariable linear regression analysis with p-values < 0.05 (0.01, 0.02, 0.04, and 0.000, respectively)

Conclusions: Abnormal common CIMT, DM, stroke severity, dyslipidemia, obesity, and increased patient age demonstrated a relationship with an unfavorable outcome. At the same time, AF and hypertension were correlated with a favorable outcome. NIHSS at admission and 24 h following IV rt-PA, DM, and common CIMT can be employed as independent predictors of functional outcome

Keywords: Functional outcome ; Acute ischemic stroke ; carotid intima media thickness ; Thrombolytic therapy

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