

# **English: Insulin-Like Growth Factor 1 Increases in R-TPA Treated Ischemic Stroke Patients**

## **Abstract**

## **Background**

In Patients and Methods they included 60 patients presenting with acute ischemic stroke; 20 patients were eligible for TPA therapy (group 1 patients) and 40 patients not received r-TPA due to contraindications or came after time window (group 2, control). All patients underwent clinical assessment using NIHSS and quantitative measurement of IGF-1 in serum by ELISA at the onset of stroke (before receiving r-TPA) and at day 7 follow up.

## **Results**

NIHSS was significantly lower and Serum IGF-1 level was significantly higher in day 7 compared to that of day 1 in the group (1) patients receiving r-TPA (P-value < 0.001). No significant difference was found in the control group (2). There was a significant negative correlation between age & door to needle time and IGF-1 serum level. There was a significant positive correlation between fo NIHSS and IGF-1 serum level

## **Conclusion**

The r-TPA decrease clinical disability and improve neuroplasticity through increasing serum level of IGF-1.  
Keywords: Stroke; r-TPA; Neuroplasticity; NIHSS; IGF-1; insulin-like growth factor

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