Is there therapeutic effect of Argatroban in Cerebral Territory Infarction?

I-U. Song[1], Y-A. Chung[2], K-S. Lee[1], J-W. Park[1]
[1]*Neurology, The catholic University of Korea, South Korea*
[2]*Nuclear Medicine, The catholic University of Korea, South Korea*

Background: Therapeutic efficacy of argatroban is globally not known yet because few clinical studies in acute ischemic stroke are reported and the sample sizes of these studies is small. The aim of this study is to demonstrate an efficacy and safety in patients with cerebral territory infarction who received argatroban within 48 hours from symptom onset. Methods: This study included patients with acute cerebral territory infarction within 48 hours after stroke onset. All subjects were divided into 2 groups: those receiving argatroban on admission (argatroban group), and those receiving aspirin only (control group). We estimated the subjects' neurologic deficits and functional outcomes by using National Institute of Health Stroke Scale (NIHSS) and modified Rankin scale (MRS) prior to argatroban infusion and aspirin administration, on first day and 10th day after initiation of the therapy. Results: In comparison to the aspirin group, the argatroban group showed significant improvement of NIHSS and MRS among before treatment, first day and 10th day after treatment. There was a significant difference of NIHSS and MRS between the argatroban group and the control group at 10th day after initiation of the therapy, which proved superiority of the argatroban group with cerebral territory infarction within 48 hours after stroke onset. Discussion: The present study suggests that argatroban has added benefit in early neurological outcomes after acute cerebral territory infarction and provides safe anticoagulation in acute cerebral territory infarction.