RECOMBINANT ACTIVATED FACTOR VII (NOVOSEVEN) FOR ACUTE INTRACEREBRAL HEMORRHAGE: EXPERIENCE OF 15 CASES FROM A SINGLE CENTRE

S. Kumar R. Garikapati S. Prabhakar
Apollo Hospitals, Hyderabad, India

Introduction: Recombinant activated factor VII (rFVIIa) limits hematoma expansion, which may reduce mortality and disability in intracerebral hemorrhage (ICH). Aim: To study the effect of rFVIIa on hematoma volume, mortality and functional outcome in ICH. Inclusion criteria: All patients presenting within 3 hours of symptom-onset with clinical & CT evidence of ICH, without any previous h/o thrombo-embolism. Methods: All patients meeting the inclusion criteria were administered rFVIIa (Novoseven) at a dose of 40 mcg/kg within four hours of onset. Conventional treatment for ICH was given to all. CT was repeated at 20-28 hours. Patients were periodically followed for 90 days. Results: 15 hypertensive patients (13 men) with a mean age of 59.9 years (range 24-73) were included between Feb 2005 and Feb 2007. Mean duration of symptoms at presentation was 101 min (range 30-180 min). The site of bleed included basal ganglia (9), thalamus (5) and mid-brain (1). Mean NIHSS score was 15 (range 4-32). The mean intracerebral blood volume was 26 ml (range 4-58 ml). GCS was <7 in six patients and seven patients required mechanical ventilation. The mean increase in hematoma volume in repeat CT scan was 2.1 ml. Mortality at 90 days was 13% (2/15). 33% (5/15) were dependent for activities of daily living at 90 days. There were no adverse effects, such as thrombo-embolic events or hydrocephalus. Conclusion: Treatment with rFVIIa within 4 hours of symptom-onset appears to be safe and possibly efficacious in ICH. Further randomized placebo-controlled trials are required to confirm this observation.