Stroke and thrombolysis in India

Sir,

I read with interest the article by Padma et al.[1] I congratulate the authors for giving rtPA in a large number of acute ischemic stroke patients. The main finding of the study is IV rtPA can be given in a group of carefully selected patients without coagulation studies. It is mentioned that the reports of PT, aPTT and platelet count were not obtained before giving rtPA. It would be of interest to know how many of the patients had deranged coagulation parameters after the reports arrived post rtPA. Was there any relationship between patients who had hemorrhagic transformation (n=5) and abnormal coagulation profile?

In a recent study among stroke patients attending the Emergency Department an elevated PT/aPTT could be predicted in patients taking warfarin or heparin/ heparinoid or on hemodialysis with 100% sensitivity and 94.7% specificity.[2] Coagulation studies may be of importance in a small group of high-risk patients.

It is stated that there is no information from developing countries on various factors that cause delay in arrival to hospital after the onset of stroke symptoms. In an urban hospital-based study one of the factors for timely arrival to a stroke unit was how close the patient lived to the stroke unit; patients were able to reach the hospital within the window period if they were within a 10km radius from the hospital.[3] Twenty-six per cent of the eligible patients in the present study did not receive rtPA since they could not afford the treatment. In a first report of a similar kind from a developing country, 78% of the eligible patients did not receive the drug because of the high cost.[4] Was the cost of rtPA subsidized for the patients in the present study? It would be interesting to know how many of the patient’s treatment (rtPA cost) was covered by medical insurance.

When there is an infrastructure to give rtPA, the two main barriers in effective utilization of thrombolysis are the cost of the drug and delayed presentation. Educating the public close to the hospital may reduce the delay in arrival. But the treatment cost would still be an important obstacle for patients to receive rtPA. Until a more cost-effective thrombolytic agent is available,[5] developing countries should focus on primary and secondary prevention strategies and the establishment of stroke units wherever possible.

With the present health and economic scenario in India, only a small group of affluent patients living in an urban area close to a stroke center will benefit from thrombolysis therapy. For an individual eligible stroke patient rtPA given in timely manner would have a significant social impact and also a gain in quality adjusted life years.

I greatly appreciate the efforts of the authors in implementing a successful brain attack thrombolysis program.

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References


Accepted on 08-03-2007