Thrombolysis: The Elusive El-dorado

Sir,

A prospective pilot study on use of I/V r-TPA (recombinant tissue plasminogen activator) in acute stroke patients admitted within 3 hrs of onset, at Lilavati Hospital was initiated from 1st July 2006 – 30th Nov, 2006, to assess feasibility of thrombolysis in an acute stroke unit and the reasons for non-thrombolysis. Out of the total 100 patients admitted during the study period, only 13 (13%) were admitted within the time–window (<3 hrs), of which only 7 were Ischaemic strokes. One patient was thrombolysed. The study shows that distance from the hospital, primary contact with general practitioner definitely delays admission. Resources should be put in creating awareness of stroke in the community and educating the general practitioners regarding the time window and NIH criteria of thrombolysis.

A prospective pilot study on use of I/V r-TPA (recombinant tissue plasminogen activator) in acute stroke patients admitted within 3 hrs of onset, at Lilavati Hospital was initiated from 1st July 2006 – 30th Nov, 2006. The aims were (i) to assess feasibility of thrombolysis in acute ischaemic stroke in an established hospital system with well equipped Stroke Unit. (ii) to find out reasons for non-thrombolysis in patients admitted within the time-window (<3hrs).

All cases of acute ischaemic stroke admitted within 3 hours of onset of symptoms were considered eligible for thrombolysis. Patients of rapidly improving TIA, haemorrhagic strokes and those admitted after 3 hrs were excluded from thrombolysis. Data of all patients were entered in the ICASS (Indian Collaborative Acute Stroke Study) proforma.1

A total of 103 patients of acute stroke were admitted during the study, (3 were “in-hospital” post-CABG strokes and not considered for final analysis), 50 patients (50%) were admitted more than 12 hours after the onset of symptoms, whereas 13 patients (13%) were admitted within the time-window (0-3 hrs) (Fig. 1). Primary contact with general practitioners (GP) accounted for 21%, whereas 79% consulted non-GP’s (neurologist/neurosurgeon/consultant physician). Out of the 13 cases admitted within the time-window, 7 were Ischaemic strokes. R-TPA was used in 1 patient giving a 14.3% rate of thrombolysis.2,3 The reasons given for not thrombolysing six patients by the concerned physicians were “no major vessel blockage” in 2, “haemorrhagic infarct” in 1, “large infarct” in 1, “recovering stroke” in 1 and “cardioembolic” in 1 case (Fig. 2). Patients admitted within the time window were older (mean age 69.2 yrs.) whereas those that were admitted >12 hrs after onset were younger (mean age 59.4yrs).4 27% patients resided nearby, 11% resided at a medium distance from the hospital and 54% of those admitted resided far from the hospital.

The study shows that a large number of acute stroke patients are seen in the city of Mumbai by consultants. First contact with the GP in acute stroke definitely delays hospital admission, thus being a major block in thrombolysis, this data is comparable with other published data from India.3,4 23% of haemorrhagic strokes were admitted within the time-window; whereas only 9% of ischaemic strokes were admitted within 3hrs suggesting that haemorrhagic stroke patients seek medical attention earlier. Direct referral to the hospital reduced admission delay, while patients referred from other hospitals/nursing homes took a longer time. Three out of six reasons given by physicians for not thrombolysing patients who where in the window are not NIH accepted exclusion criteria.5 Distance from the hospital was also a major factor for delay in admission, as only 27% patients resided nearby and more than 54% resided far from the hospital, these data are comparable with published reports.4

The study suggests that more resources should be put into creating awareness of stroke in GP’s and physicians regarding the time window and NIH criteria of thrombolysis. Educating the community and stroke-prone subjects to recognize stroke symptoms with the help of mass media and awareness campaigns will also help in early admissions.

Acknowledgements
We would like to thank the Vice President Dr N Trivedi and Research Director Dr PM Dalal for allowing us to do this study. We also thank all the Neurologists at Lilavati Hospital, Dr A Sirsat, Dr V Chauhan and Dr R Patankar for their cooperation. Data was presented as a poster at the Asia Pacific Conference Against Stroke, New Delhi, 29th Mar 2007- 1st Apr 2007.

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Received : 6.8.2007; Accepted : 5.9.2007

REFERENCES

Disseminated Abdominal Hydatidosis

Sir,

Human hydatid disease results from infection with larval form of Echinococcus granulosus. Rupture of Hydatid cyst into abdominal cavity, causing multifocal dissemination, is uncommon complication affecting 2-12% of patients.1 A case of disseminated abdominal hydatidosis is presented along with a brief review of literature pertaining to life cycle, epidemiology and management of echinococcus.

25-year-old female, sheep and dog rearing by occupation, presented to OPD with complaints of anorexia, fatigue, weight loss, abdominal lump and intermittent high-grade fever for 3 months. She had undergone abdominal laprotomy for retroperitoneal hydatid cyst 10 years back. Physical examination revealed a large mass arising from pelvis measuring (15 cm x 10 cm x 8 cm) rising up to the umbilicus, with a dull note on percussion over it. There was hepatomegaly (8 cm below costal margin). Laboratory examination revealed Hb-6.8 gm/dl, total leukocyte count-5600 cu/mm with 15% eosinophils. All other hemorrheological parameters were within normal limits. Computer tomogram of abdomen (Figs. 1, 2) showed multiple well-defined cystic areas with internal septations spreaded all over abdomen. In view of the investigations diagnosis of disseminated abdominal hydatidosis was made. The patient was prescribed Albendazole and was advised admission for further management. She refused admission and was lost to follow up.

Echinococcus is a cosmopolitan parasite, with highest prevalence in Mediterranean countries, North and East Africa, Australia and South America. It is widely prevalent in Indian subcontinent as well, and is frequently reported from states of Tamil Nadu, Andhra Pradesh, Gujarat, South Maharashtra and North Karnataka.2 Treatment options for cystic hydatid disease are surgery, drug therapy and percutaneous drainage. Disseminated echinococcus is an absolute indication for antihelminthic drug therapy. Albendazole (10mg/kg) is most commonly used drug, administered for at least 3-6 months, causes death of parasite by preventing glucose absorption through cell wall, but a favorable response is obtained only in 29% patients and in 48% there is no change in cyst dimensions.3 The main disadvantages of use of albendazole are its hepatotoxicity, teratogenicity and prolonged treatment duration. Surgery has the potential to remove the cyst and result in complete cure. Surgical procedures include cystectomy with removal of the germinal and laminated layers and preservation of pericyst. Operative mortality varies from 0.5-4%. Cyst fluid spillage can occur during surgery resulting in anaphylaxis and/or secondary echinococcus (2-25% of cases). Recently,