Acute ischaemic stroke: management, recent advances and controversies

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Acute ischaemic stroke is a major cause of death and disability. It may become an enormous burden to the patients themselves, their families as well as the health care systems. Patients at risk of airway, breathing and circulatory compromise should receive prompt resuscitation. Vital parameters and neurological status should be closely monitored. Atentions to blood pressure, temperature and sugar profile are important. The significance of early and correct diagnosis and subsequent treatment cannot be over-emphasised. There have been tremendous recent advances in different treatment modalities in acute stroke management. Various recanalisation modalities include intravenous and/or intra-arterial thrombolysis, acute defibrinogenation, anti-platelet treatment and anticoagulation. Carotid endarterectomy and endovascular strategies are recommended in selected patients. Advanced neuro-imaging techniques and neuroprotectants are being evaluated. Multidisciplinary stroke teams have been shown to improve patient survival and functional outcome. Pre-defined algorithms and protocols should be in place to expedite smooth and effective delivery of stroke service. Future directions should be aimed at exploring safer recanalisation modalities and extending the limit of the current 3-hour treatment window for thrombolysis. (Hong Kong j.emerg.med. 2004;11:35-52)

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