The Royal Gwent Hospital provides a service to thrombolyse patients who have experienced an acute ischaemic stroke. This service is provided by the Stroke team in conjunction with the Emergency Department. The Stroke thrombolysis care pathway has been devised and is available on the Aneurin Bevan Health Board intranet and within the Emergency Department and should be reviewed by all team members.

**Background**

Stroke remains the third most common cause of death and disability with approximately 150,000 people having a stroke each year in the United Kingdom accounting for over 56,000 deaths in England and Wales (Mant et al, 2004).

The underlying pathology in 85% of patients with stroke is cerebral ischaemia (infarction). Thrombolytic therapy, which works by dissolving the thrombus can potentially re-open the occluded artery and reverse the stroke.

Rt-PA has been proven a highly effective thrombolytic agent which acts by activating, activated factor II and there by converts fibrinogen to **fibrin**. Rt-PA was granted a restricted licence for use in acute ischaemic stroke by the European Regulatory Agency in 2003.

There have been a number of RCTs published from North America, Europe and Australia examining the role of thrombolysis in stroke. NICE (2007) considered the results of all these trials as well as the results of a large pan-European post-marketing study UK Safe Implementation for Thrombolysis in Stroke - Monitoring Study (SITS-MOST).
Their opinion is that Alteplase (rt-PA) is both clinically effective and cost effective and should be administered to all patients presenting with stroke but within the framework of a specialist setting and providing the strict inclusion and exclusion criteria are adhered too.

The following initial considerations to treatment are:

- Clinical signs and symptoms of acute stroke.
- Time of symptom onset: treatment needs to be administered **within 4.5 hours** of onset.
- Haemorrhage has been excluded.
- Aged between 18-80 years old* The NINDS criteria for inclusion and exclusion are assessed.
Referral Process

FAST Positive

Suspected Ischaemic Stroke: Time of symptom onset determined and < than 4.5 hours. **Contact Stroke Team on BLEEP 0630**

ROSIER screening completed and score >0

Contact CT Department on EXT: 4348 to request immediate CT Head Scan

Commence NIHSS Assessment (Scores >4 and < 25)

Haemorrhage excluded on CT following expert CT interpretation by the radiologist

Meets inclusion criteria. Collective Decision Made Consent Obtained/Discuss with relatives

Thrombolysis appropriate: Administer Alteplase as bolus then infusion over one hour. Remain in RESUS for a minimum of 30 minutes (Ideal standard one hour)

Transfer to Acute Stroke Unit for Hyperacute care
Useful Contacts

Dr Yaqoob Bhat: Stroke Consultant: 07868888022
Dr T. Hasan: Stroke Consultant: 07798706203
Kylie Crook: Stroke Specialist Nurse: Bleep 0630
Carla Watkins: Stroke Specialist Nurse: Bleep 0895
Ward B6E/W (Acute Stroke Unit): Ext: 4593/4
Bed Manager: Ext: 8981/2; Bleep 0746

Please note that a thrombolysis rota giving the daily contacts is available in the thrombolysis file in resus.

References


Developed by:- Kylie Crook/CNS/Stroke Team (RGH) 2010