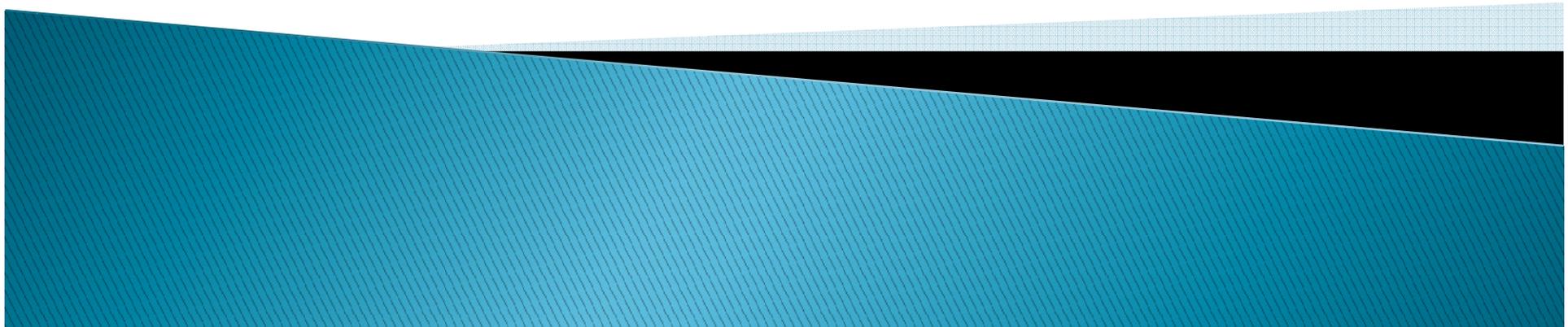


European Stroke Conference 2011

Dr. Amer Jafar
Aneurin Bevan Local Health
Board

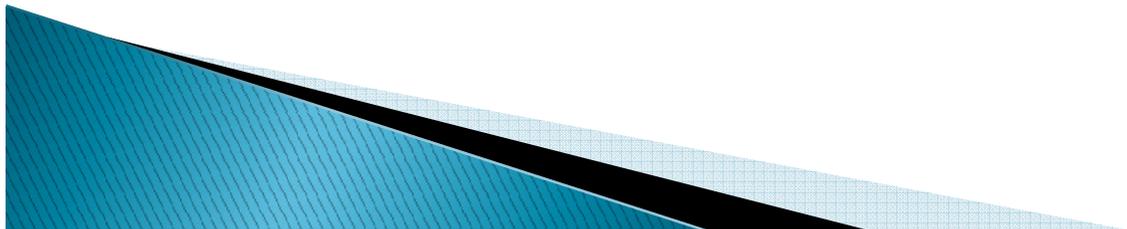


Submitted Abstracts/Top 10 Countries 2009-2011

Stockholm 2009	Barcelona 2010	Hamburg 2011	
UNITED KINGDOM	UNITED KINGDOM	UNITED KINGDOM	≡
GERMANY	GERMANY	GERMANY	≡
SPAIN	SPAIN	SPAIN	≡
ITALY	SOUTH KOREA	FRANCE	↑
SWEDEN	JAPAN	JAPAN	≡
FRANCE	FRANCE	SOUTH KOREA	↓
SOUTH KOREA	ITALY	THE NETHERLANDS	↑
THE NETHERLANDS	THE NETHERLANDS	USA	<i>New!</i>
PORTUGAL	CANADA	RUSSIAN FEDERATION	<i>New!</i>
IRELAND	AUSTRALIA	ITALY	↓

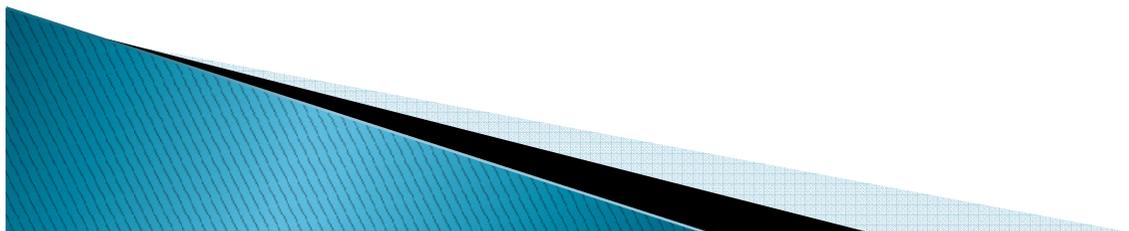
Meta-analysis and reviews

- ▶ Female risk of SAH:
- ▶ Incidence of subarachnoid haemorrhage (SAH) is higher in women than in men, in particular after age 50
- ▶ 12 case-control, one longitudinal, and one case-crossover study
- ▶ Female hormone levels characteristic for reproductive age, i.e., the physiological premenopausal state or HRT during the postmenopausal state, are associated with a lower risk of SAH

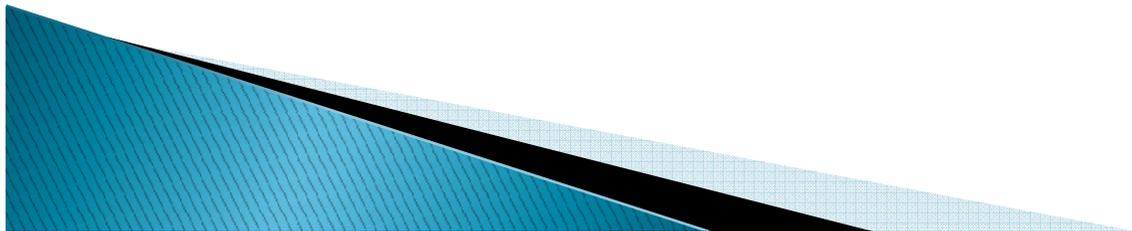


Dose and combination: anti HT

- ▶ Cochrane and Medline databases were searched for systematic reviews and randomised controlled trials of antihypertensive drugs
- ▶ CCBs reduced inter-individual variability in SBP when added to another agent
- ▶ Conclusion: Effects of antihypertensive drugs on SBP variability are dose-dependent and persist when used in combinations

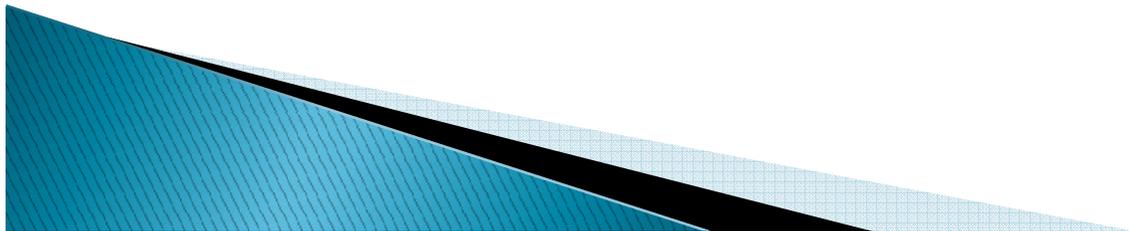


- ▶ Use of a high-dose of a CCB alone or in combination with other agents is therefore likely to be particularly effective in prevention of stroke

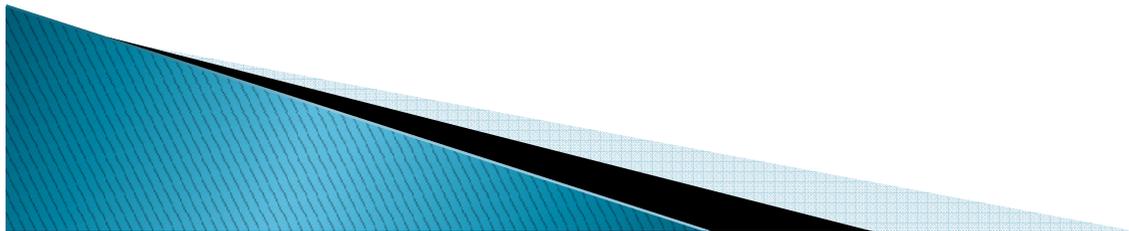


IMMUNOTHERAPY FOR STROKE: A NEW HOPE?

- ▶ Aim: developing a novel treatment strategy for stroke, relying on antibodies targeting the pro-neurotoxic effects of tPA
- ▶ It demonstrates the efficiency of immunotherapy in a complete pre-clinical screen
- ▶ after a single administration alone or with late tPA-induced thrombolysis, antibodies dramatically reduce ischemic brain injuries

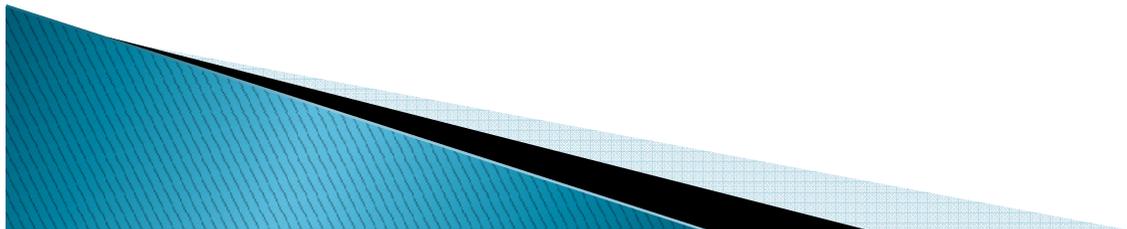


- ▶ Immunotherapy strategy is thus able to limit ischemic histological and neurological damages in mice, and extends the therapeutic window of tPA-driven thrombolysis



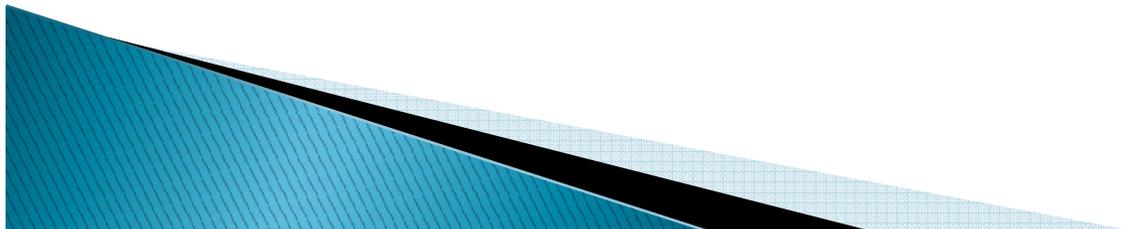
ICH: IV Nicardipine

- ▶ Moderately aggressive blood pressure (BP) lowering with target systolic BP (SBP) ≤ 160 mmHg using IV nicardipine is the major strategy for patients with acute intracerebral hemorrhage (ICH) in Japan
- ▶ This is an interim report of a prospective, observational study from 10 centers
- ▶ SBP lowering (range 120–160 mmHg) using IV nicardipine with tight BP monitoring appears to be safe and feasible for acute ICH

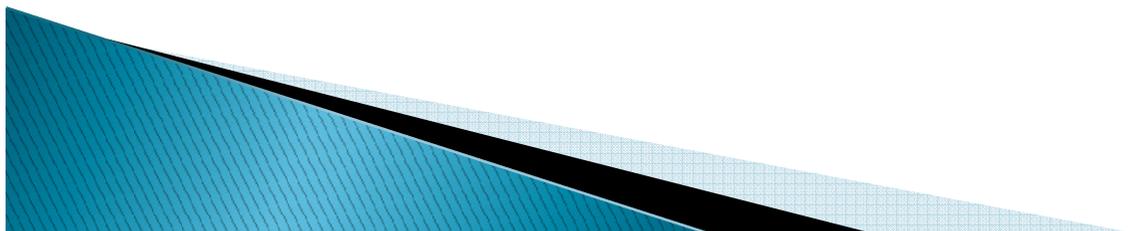


(PICA) INFARCTION

- ▶ Retrospectively analyzed data from 81 consecutive patients with PICA infarction during a five-year period (March 2005–March 2010)
- ▶ The mean age of our serie was 64.6 years, 69.1% in male
- ▶ PICA infarction was isolated in 61 patients and was accompanied by other territories in 20 patients

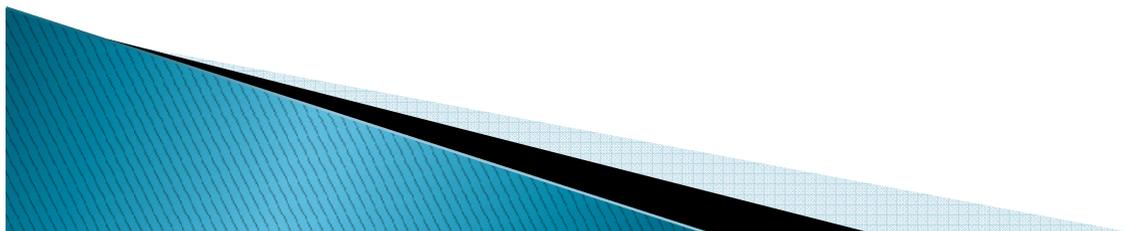


- ▶ Clinically, gait disturbance and other cerebellar signs were the prominent presenting features (81.5%)
- ▶ As main complications, there was hemorrhagic transformation in 23 patients (28.4%) and hydrocephalus appeared in 14 patients (17.3%)
- ▶ Prognosis: depends on the number of territories involved

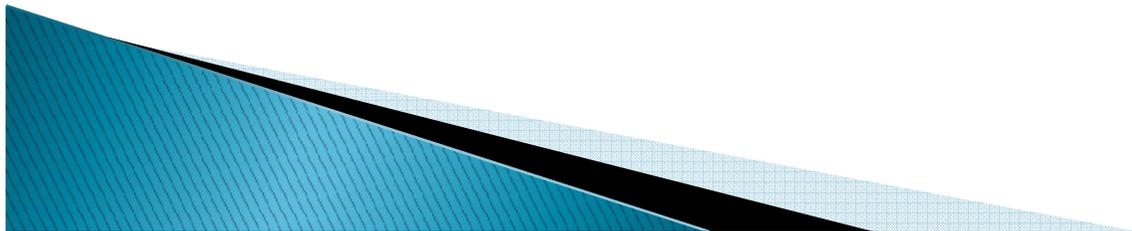


Statins and stroke outcome

- ▶ Medline/Pubmed was searched for relevant articles on stroke, stroke outcome and statins
- ▶ Ten studies met the inclusion criteria
- ▶ Pretreatment with statins may decrease in-hospital mortality in stroke-patients who didn't had tPA treatment
- ▶ There was no significant difference between statin users and no statin users for functional outcome in patients who had tPA treatment

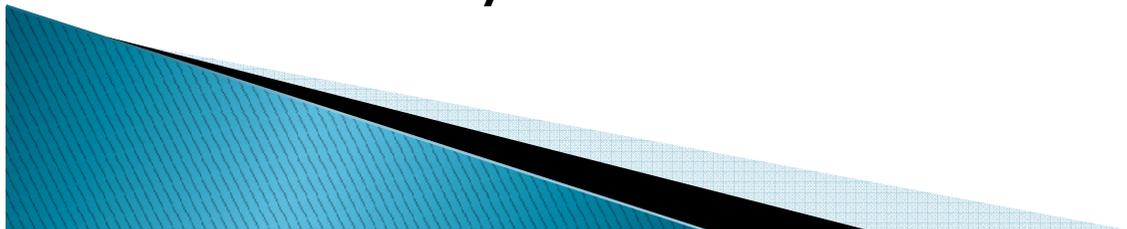


- ▶ It was found that statins may increase the risk of hemorrhagic transformation in the tPA patient group



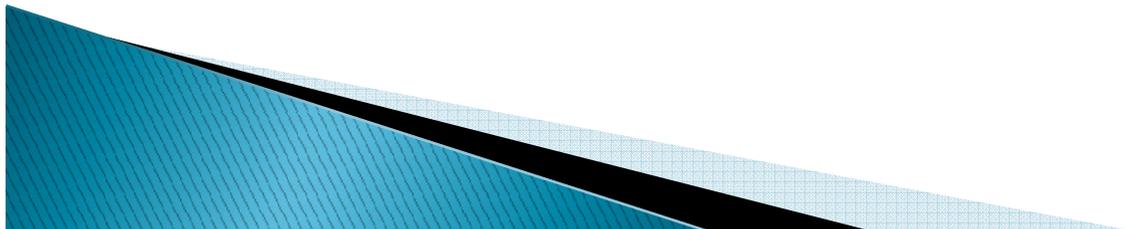
SURGICAL DECOMPRESSION FOR CEREBRAL OEDEMA IN ACUTE ISCHAEMIC STROKE

- ▶ Large hemispheric cerebral infarction has a high case fatality, largely due to brain edema
- ▶ Cochrane Stroke Group Trials Register
- ▶ 5 completed randomised controlled trials, three had available published results
- ▶ These studies included 134 patients
- ▶ Surgical decompression lowers the risk of death and death or severe disability (mRS >4). Survival may be at the expense of severe disability

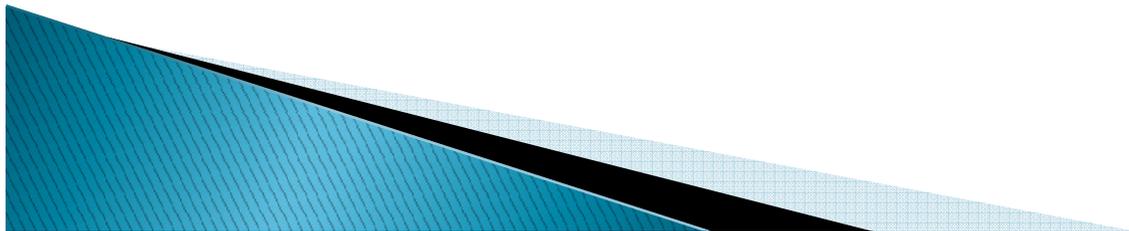


DRIVING AFTER TRANSIENT ISCHAEMIC ATTACK (TIA)

- ▶ All patients referred to TIA clinic of Diana princess of Wales, hospital, Grimsby, UK were retrospectively studied
- ▶ A total of 234 patients were referred as TIA to specialist TIA clinic from 01 Jan 2010 to 23 June 2010
- ▶ In specialist TIA clinic, driving advice was given to 72.2% of TIA /minor stroke patients

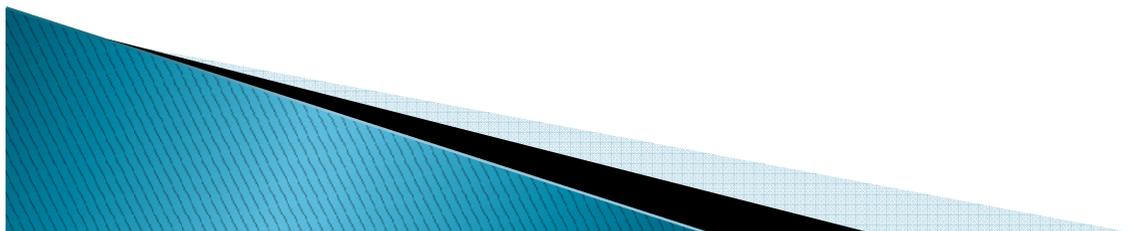


- ▶ Patients are not always informed about their fitness to drive following initial consultation and many patients do not receive driving advice after attending specialist clinic
- ▶ Further education of the doctors is needed to ensure 100% advice.

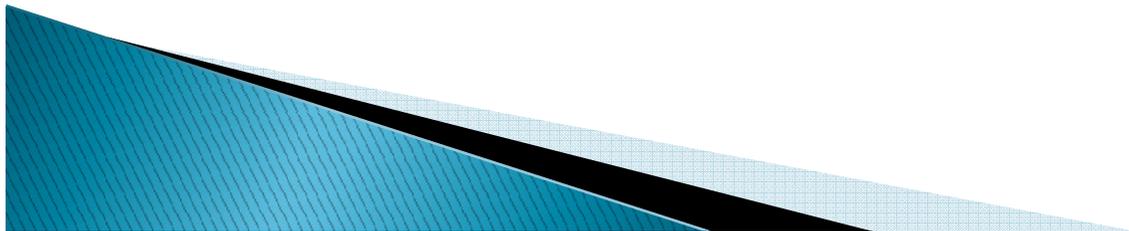


RECURRENT TIA AND EARLY RISK OF STROKE

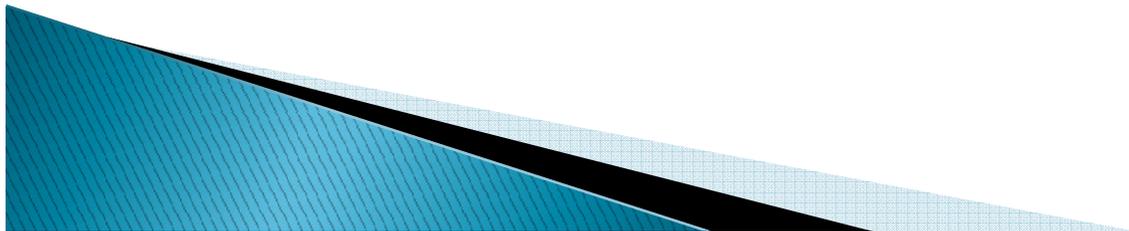
- ▶ Many guidelines recommend urgent intervention for TIA patients with 2 or episodes within 7-days to reduce the early risk of stroke
- ▶ Between April 2008 and December 2009, the team included 1255 consecutive TIA patients from 30 Spanish stroke centers (PROMAPA study)



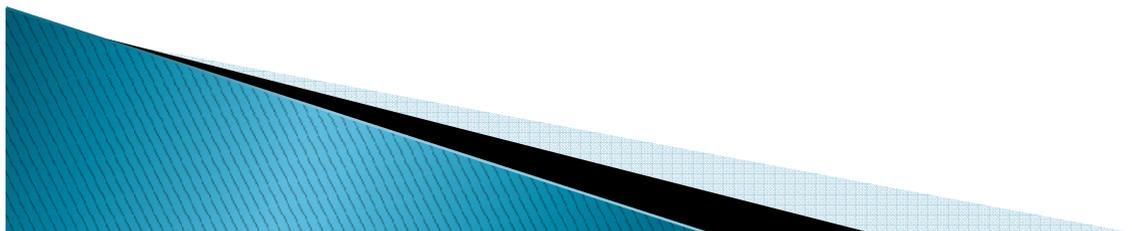
- ▶ Enough information was assessed in 1137 patients (90.6%). 7-day and 90-day stroke risk were 2.6% and 3.8% respectively
- ▶ Recurrent TIA was observed in 274 (24,1%) patients
- ▶ Duration < 1 hour and motor weakness were independent predictors of recurrent TIA



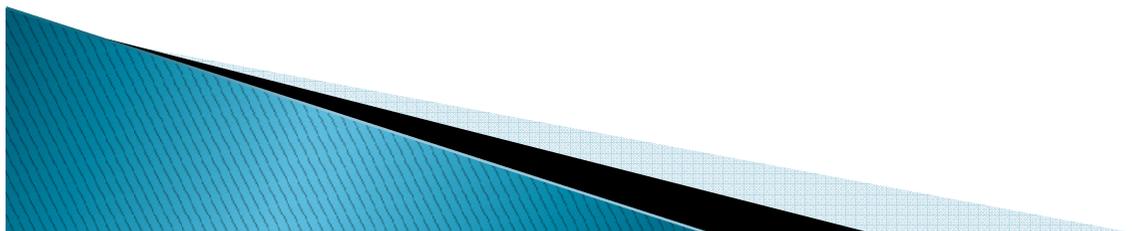
- ▶ According to the results, recurrent TIA within 7-days is associated with a greater subsequent stroke risk than after a single TIA
- ▶ Nevertheless, the authors were not able to find any independent predictor of stroke recurrence among these patients



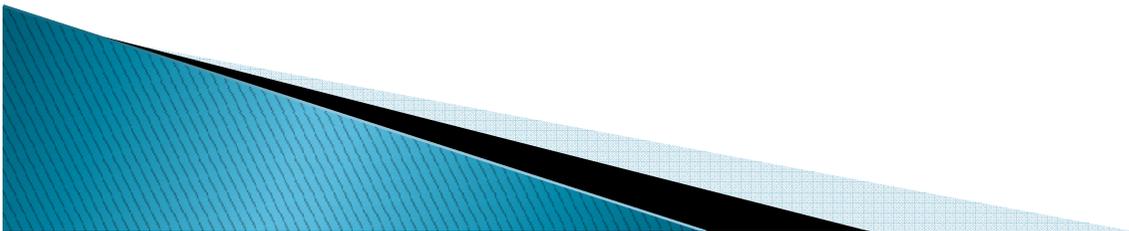
- ▶ ABCD, ABCD2, ABCD3 and ABCD3i scores were able to identify individuals at high early risk of recurrent stroke after a TIA in Caucasians
- ▶ Aiming: to validate these scores in Asians population
- ▶ The 30-day risk of stroke of 226 TIA patients was 4.6%. Patients with ABCD score of 0–3 and 4–6 had stroke 0% and 7.2% at 30 days respectively



- ▶ Patients with ABCD and ABCD2 scores ≥ 4 had a significantly higher incidence of stroke at 30 day
- ▶ Conclusion: ABCD, ABCD2 scores were valid in identifying 30-day stroke after TIA in Asians. Further studies are needed for ABCD3 and ABCD3i scores

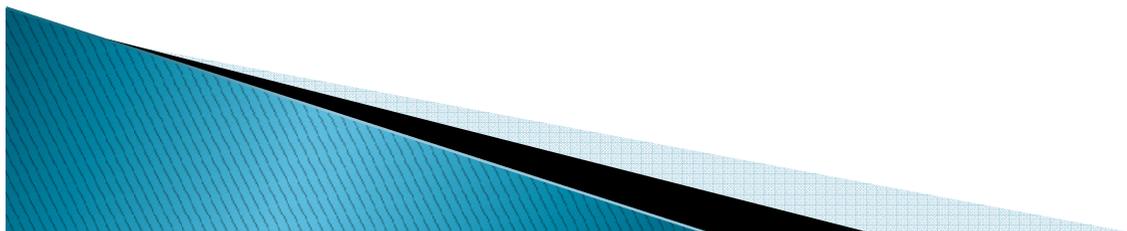


- ▶ TIA patients with first presentation of symptoms and a high ABCD2 score ($=$ or $>$ 4) were more likely to have a finding of infarction on cerebral imaging.

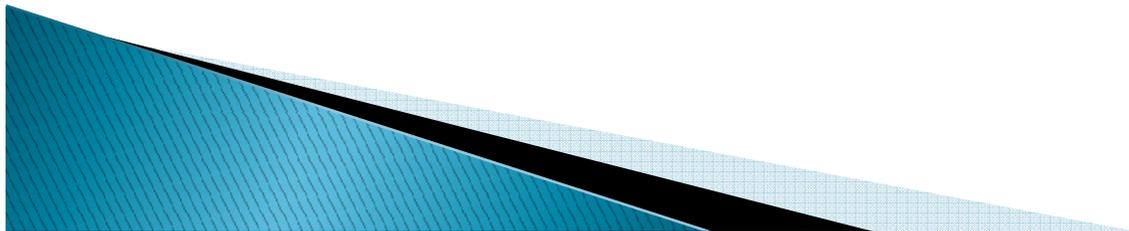


BNP: TIA diagnosis

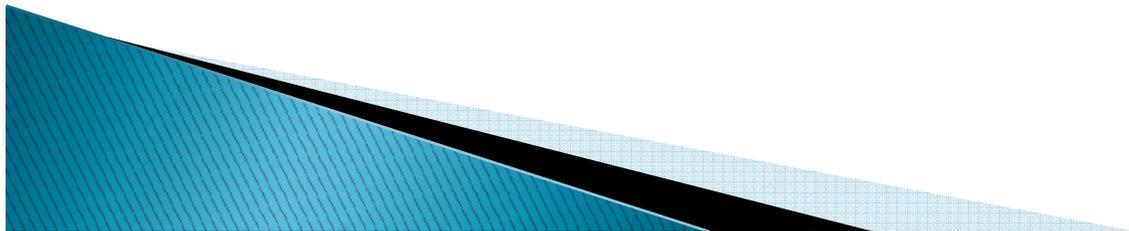
- ▶ Brain Natriuretic Peptide (BNP) may be a biomarker for occult paroxysmal atrial fibrillation (AF) in patients with ischaemic stroke of undetermined aetiology
- ▶ Team related baseline BNP levels at the time of a first TIA or ischaemic stroke to aetiology in patients who had a recurrent ischaemic stroke during follow-up



- ▶ The team studied all patients in the Oxford Vascular Study (2002–2009) with TIA or ischaemic stroke who had a recurrent stroke more than 90–days after the initial event
- ▶ Blood was drawn at the first event and stored
- ▶ Patients with TIA or stroke of initially undetermined etiology in whom AF was detected at the time of subsequent recurrent stroke had had high BNP levels at the time of the first event

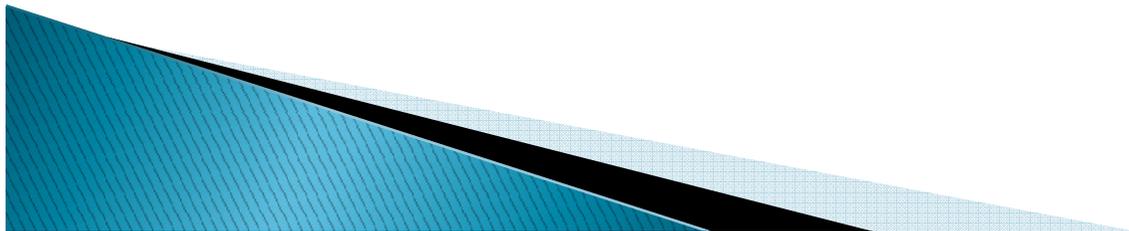


- ▶ BNP may be useful in identification of patients with paroxysmal AF and in the etiological classification of TIA and stroke

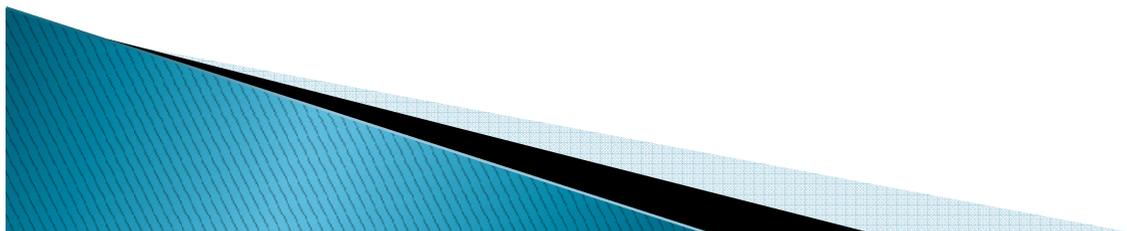


STROKE VISUAL DEFICIT

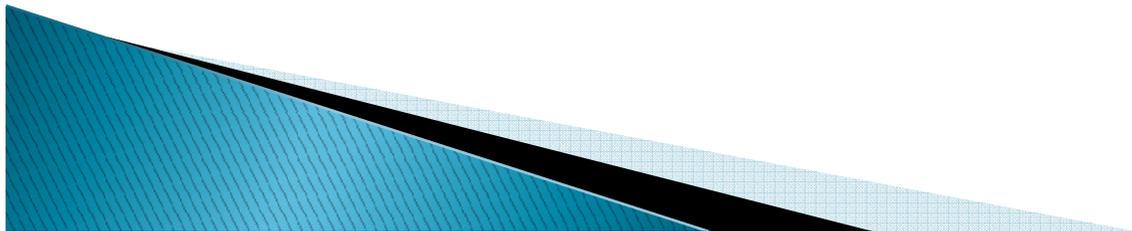
- ▶ Little is known about the outcome and recovery mechanisms of visual perception after a focal lesion of the occipital lobe in humans, especially after stroke
- ▶ describe the clinical course and the neural substrates of conscious perceptive visual deficit after posterior cerebral artery infarct.



- ▶ prospectively included eight patients (7 men and 1 woman; mean age = 64.6 years \pm 18) with visual deficit induced by partial damage of the striate cortex related to acute posterior cerebral artery infarct
- ▶ In the acute phase of stroke, visual deficiency was global (3 / 8 patients), selective to colour (4 / 8 patients) or selective to motion (1 / 8 patients)

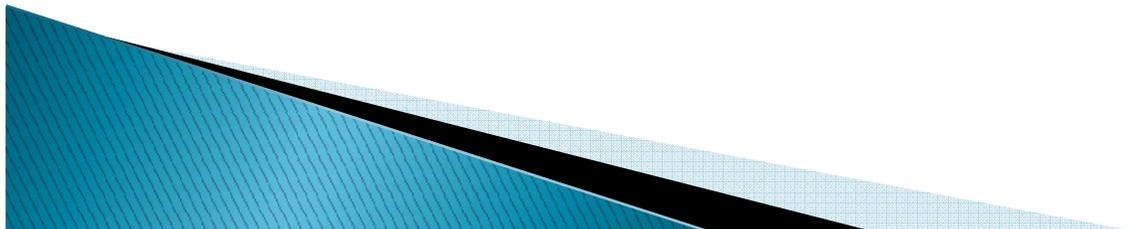


- ▶ Extensive visual recovery occurs early after partial acute posterior cerebral artery infarct

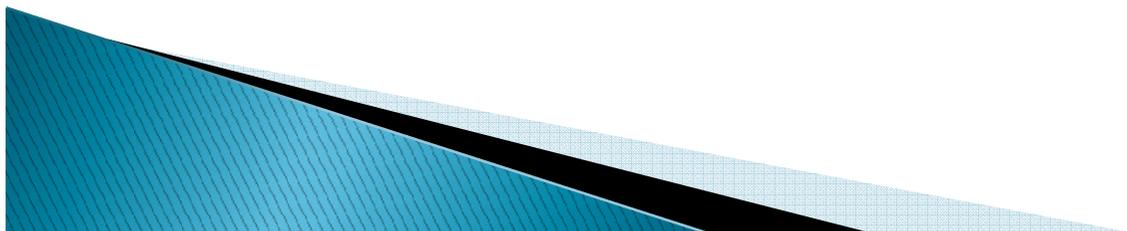


Chest infection and NG Tube feeding

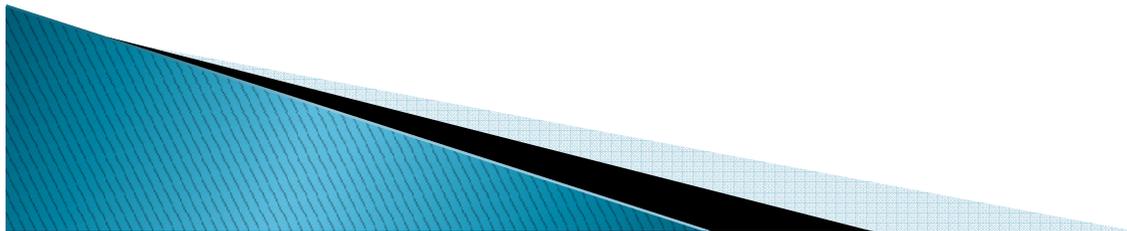
- ▶ Dysphagia is seen in more than 65% of post stroke patients, and is a marker of poor prognosis, increase risk for chest infection, malnutrition, persistent disability, prolonged hospital stay and increase cost burden on NHS, institutionalisation and increase mortality



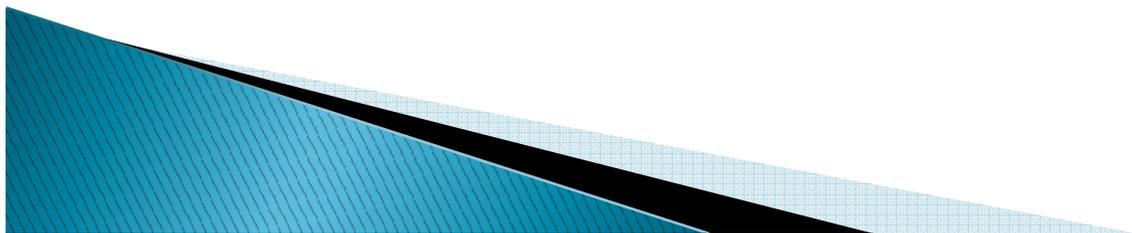
- ▶ Aim: to evaluate the safety of Nasogastric tube feeding in stroke patients suffering from dysphagia
- ▶ The study is randomised prospective study of Stroke patients in age group of 50–94 years that was completed within 04 months
- ▶ 43 patients for this short study randomly and followed them for 04 months in different wards at King George hospital



- ▶ 85% of post stroke patients develop swallowing problems on presentation
- ▶ 93% of patients on NG tube feed developed Pneumonia, out of these 63% succumbed to chest infection
- ▶ Maximum incidence of chest infection was seen among 60–90yrs+ age group who were chosen for NG Tube feed and maximum deaths were among 70–90yrs+ age group directly due to aspiration pneumonia

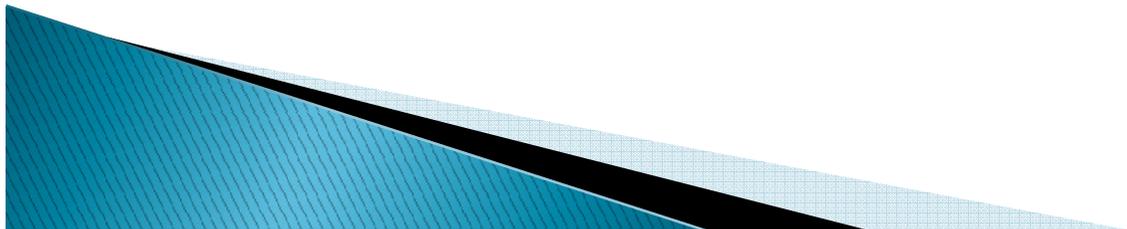


- ▶ Recognise "silent aspiration" which is seen among 40–50% among these patients during their initial presentation



SERBIAN EXPERIENCE

- ▶ To determine the efficacy and safety of systemic thrombolysis among patients with acute ischaemic stroke (IS) due to atrial fibrillation (AF) comparing to stroke patients of other causes (OC)
- ▶ Data were from the Serbian Experience with Intravenous Thrombolysis in Ischemic Stroke (SETIS) study

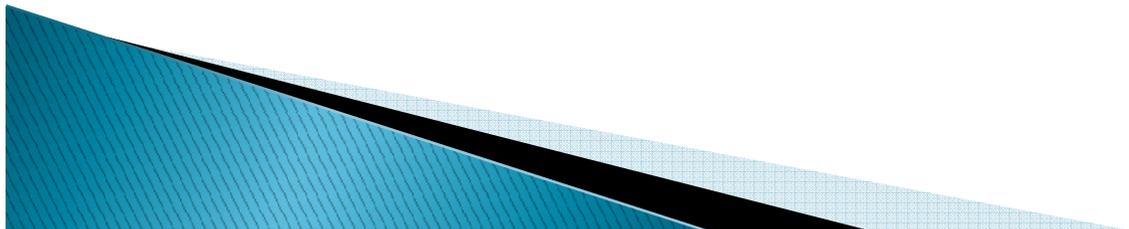


- ▶ SETIS: a prospective, ongoing, multicenter, open, and observational study in Serbia of all patients who have received alteplase for acute IS during four year period
- ▶ Among 425 patients with IS who received intravenous thrombolysis, there were 75 (17.6%) patients with stroke due to AF
- ▶ Intravenous thrombolysis in stroke patients with AF is as effective as in stroke patients without it, but with a higher rate of symptomatic hemorrhages among those with AF

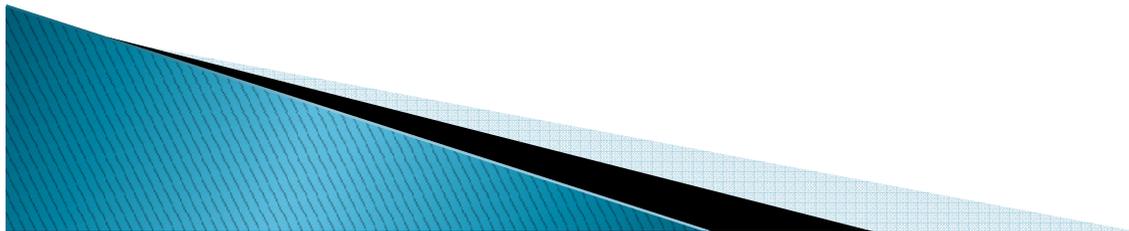


Thrombolysis service

- ▶ **DELIVERING THROMBOLYSIS FOR A SCOTTISH RURAL POPULATION**
- ▶ Retrospective data was collected from June 2009 to June 2010 from the thrombolysis database in Scotland
- ▶ Presentations of patients also showed about 80% of patient's attended with stroke symptoms between 9am–10pm

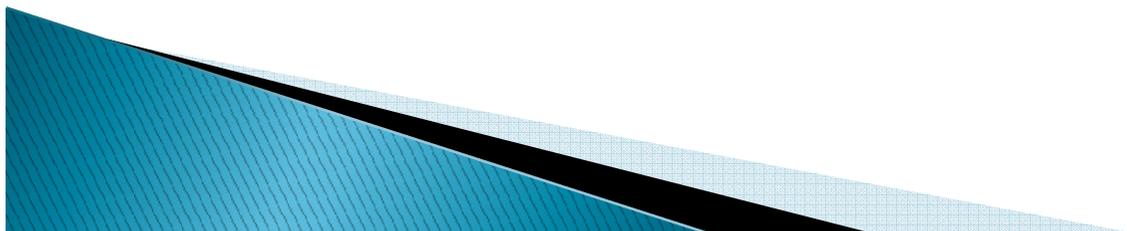


- ▶ Centralised service has been unable to deliver thrombolysis in time to maximize benefit to rural patients
- ▶ Other models including telemedicine needs to be considered for 24/7 especially for the Scottish rural population

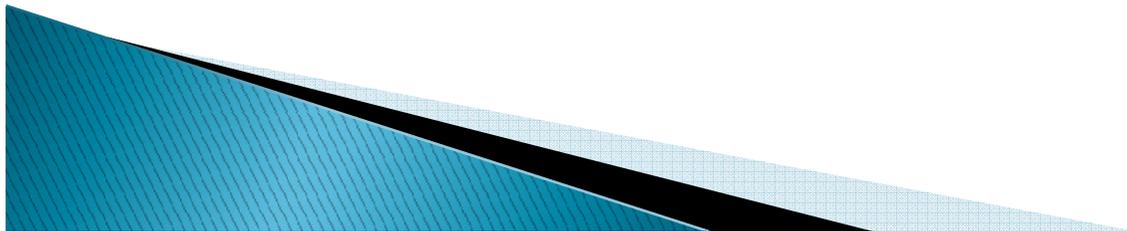


THROMBOLYSIS IN CERVICAL ARTERY DISSECTION

- ▶ The authors used the CADISP–database to compare outcomes of CADStroke–patients treated with and without thrombolysis
- ▶ Among 612 CADStroke–patients, 68 (11.1%) received thrombolysis
- ▶ Thrombolysed patients had more severe strokes (median NIHSS–score 16 versus 3; $p < 0.001$), and more often occlusions of the dissected artery



- ▶ As thrombolysis was neither independently associated with unfavorable outcome nor with an excess of symptomatic bleedings, thrombolysis should not be withheld in CADStroke-patients
- ▶ The lack of any trend towards a benefit of thrombolysis indicates the legitimacy to search for more efficient treatment options. As most patients were treated intravenously, endovascular procedures deserve testing in a comparative trial







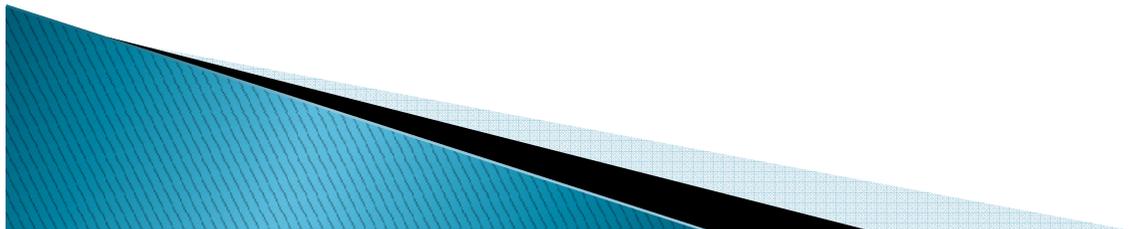














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