Background:

Three hundred and sixty patients were managed on the stroke rehabilitation unit during trial conditions is maintained after transition to mainstream practice.

Results:

79 (15%) had AF, of whom 68 (86%) were not on warfarin and 54 of the 68 (79%) were not on aspirin either. Previous diagnosis of AF was documented in 56 (30 male); 48% < 80yrs, of whom 46 (78%) were not on warfarin and 33 (71%) of these were not on aspirin either. Contraindications to warfarin were identified in 22; recurrent falls (5), unsupervised dementia (4), terminal illness (2), dyspepsia (4), unexplained anaemia (4), recent GI haemorrhage (2), haematuria (1), of which the final 11 were also appropriate reasons to avoid aspirin. There was no formal documentation of reasons for not using prophylaxis evident in their case notes.

Conclusions:

The majority of AF cases were not receiving either prophylaxis. Although reasons were evident for avoiding warfarin in almost half of the prior diagnoses, the reasons for omitting aspirin are not clear. Formal documentation should be considered to explain why proven prophylaxis against stroke is not being used in the elderly.

**STROKE REHABILITATION UNITS: RANDOMISED TRIALS AND MAINSTREAM PRACTICE.**

I Perez, J Eade, M Whittink and L Kalra, Orpington Stroke Unit, Bromley Hospitals NHS Trust & King's College School of Medicine and Dentistry, London.

**Background:** Several studies have shown that stroke units improve patient outcome under test conditions. The reproducibility of these findings in mainstream practice remains unknown.

**Patients & Methods:** An observational study over 3 years was undertaken on a stroke rehabilitation unit to determine variances in patient composition and outcome from data collected during a randomised controlled study.

**Results:** Three hundred and sixty patients were managed on the stroke rehabilitation unit over the 3 year period of the study. Of these, 124 participated in a randomised study (Year 1) and 236 were managed on the stroke rehabilitation unit in the 2 years after the study (Years 2 & 3). The proportion of patients with very severe strokes managed on the unit increased from 18 (15%) in Year 1 to 33 (27%) in Year 3 (p<0.01). The outcome in stroke patients with intermediate prognosis managed on the unit after its transition to mainstream practice was similar to the outcome observed under trial conditions. Despite comparable stroke characteristics, the number of severe stroke patients being discharged home and median discharge Barthel Index rose significantly over the 3 year period (Discharge home: 48% v 16%, p<0.02; Discharge Barthel Index 9 v 6, p<0.05).

**Conclusions:** Mainstream stroke rehabilitation units have a higher proportion of severely disabled stroke patients compared with trial units. Outcome observed in stroke patients within each prognostic group managed on the stroke rehabilitation unit during trial conditions is maintained after transition to mainstream practice.

**THE EFFECT OF AGE AND HYPERTENSION ON PRIMARY INTRACEREBRAL HAEMORRHAGE (PICH).**

By E Chua, C Watkins, C Jack* and A K Sharma

Aintree Stroke Unit, Department of Geriatric Medicine, Longmoor Lane, Liverpool. L9 7AL. Department of Geriatric Medicine, RLUH, Prescot Street, Liverpool, L69 3BX*.

**Introduction:** Stroke is a major cause of mortality and morbidity in the elderly and hypertension is regarded as the most important risk factor. However, there is little data on hypertension, ageing and PICH.

**Aim:** To examine the effect of ageing and the relationship between PICH and hypertension.

**Method:** A retrospective analysis of 2435 patients with stroke in 2 teaching hospitals in Liverpool, 5 countries in Eastern Europe and 7 countries in Western Europe between Oct 1994 - Oct 1996. Data were pooled to provide sufficient numbers for meaningful statistical comparisons.

**Results:** From 2435 patients with a clinical diagnosis of stroke, there were 264 PICH (approximately equal numbers M: F) identified by CT scanning (77% scanned). Of these 947 (51%) had a previous history of hypertension but only 690 (73%) were on treatment. There were significantly more PICH in the untreated hypertensives compared to treated hypertensives (18% vs. 13%, $\chi^2$ (Yates) = 4.52, p = 0.03, OR 1.55 [1.36 - 1.76]). There were also significantly more PICH in the untreated 'younger' hypertensives (defined as less than 65 years old) than the untreated 'older' hypertensives (defined as 65 years old or greater, 26% vs. 14%, $\chi^2$ = 5.41, p = 0.02, OR 2.22 [1.12 - 4.43]). Similarly, the untreated 'younger' hypertensives had significantly more PICH than the treated 'younger' hypertensive (26% vs. 16%, $\chi^2$ = 4.91, p = 0.03, OR 1.87 [1.07 - 3.26]) but this was not observed in the untreated and treated 'older' hypertensive (14% vs. 11%, p = 0.48) nor in the treated 'younger' and 'older' hypertensive patients (16% vs 11%, p = 0.08).

**Conclusion:** The current data suggests hypertension to be a risk factor for PICH but its role appears to diminish with advancing age.

**BLOOD PRESSURE VARIABILITY AND LACUNAR STROKE.**

CA BRYANT1, J SYDENHAM1, DR LEE1, H MARKUS2 AND SHD JACKSON3

1Clinical Age Research Unit, King’s College School of Medicine and Dentistry and 2Department of Clinical Neurosciences, Institute of Psychiatry, King’s College, London

**Introduction:** It is suggested that histologically thickened perforating vessels in lacunar stroke patients are unable to autoregulate normally. Falls in blood pressure (BP) could result in acute infarction in the territory of one perforator (lacunar stroke) or, if chronic, in more diffuse white matter ischaemia (leukoariosis). Excessive blood pressure variability in such patients may contribute to the pathogenesis.

**Methods:** 20 patients with lacunar stroke underwent 24hr ambulatory blood pressure monitoring using a Spacelabs 90207 monitor. Readings were taken every 15mins from 0600 to 2400 and then every 60mins until 0600. Age, sex and BP matched healthy normotensive controls were identified for 19 patients from an existing database. From the BP data within subject standard deviation (SD) and the SD/mean as a coefficient of variability (CV) were derived and comparisons made using paired t tests.