AGE, INFLAMMATORY RESPONSE AND OUTCOME AFTER ACUTE MYOCARDIAL INFARCTION

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Introduction
Acute myocardial ischaemia evokes a local and systemic inflammatory response which may cause additional local tissue injury. Using the total leucocyte count and differential as peripheral markers, the aim of this study was to determine if excess morbidity/mortality observed in elderly patients may be related to the post MI inflammatory response.

Methodology
Patients hospitalised with acute MI (May-Sept. '96) were studied from admission to discharge or death. Exclusion criteria, corticosteroid use, malignancy, infection, recent surgery. Outcome variables: congestive heart failure (CHF), arrhythmias, re-infarction, cardiogenic shock, death. Logistic regression analysis was employed to control for clinical variables and early interventions which may affect outcome.

Results
185 patients studied (107 £ 65yrs) In-hospital morbidity was higher in elderly patients (p<0.01). There was a strong association between the presence of a relative neutrophilia (> 65% of total leucocytes) and/or a relative lymphocytopenia (< 25%) on admission and cardiovascular morbidity (p<0.0001) but not mortality. The association was strongest for CHF (p<0.0001) and re-infarction (p<0.01). There was no association between neutrophilia, lymphocytopenia and age. Independent predictors of CHF in the elderly were relative lymphocytopenia (OR 11; CI 3.7, 33.7) and PTCA (OR 0.2; CI 0.07, 0.61), compared to relative neutrophilia/lymphocytopenia may be a marker of early CHF.

Conclusions
Elderly patients experience more post-infarct complications. Although a relative neutrophilia/lymphocytopenia may be a marker of early CHF and re-infarction, this effect is independent of age. The excess morbidity observed in elderly patients may be due to differences in early interventions and other age-related physiological changes. Further studies addressing more specific markers of inflammation associated with ageing and ischaemia are warranted.

DIURNAL BLOOD PRESSURE CHANGE FOLLOWING STROKE IS RELATED TO LONG TERM OUTCOME

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Introduction. A reduced nocturnal blood pressure (BP) fall has been associated with higher prevalence of cardiovascular disease including stroke. In cross sectional studies, stroke patients compared to non-stroke patients have an altered diurnal BP pattern. The aim of this study was to examine prospectively the association between diurnal BP profile and stroke outcome.

Methods. 55 conscious subjects (median aged 77 y) admitted to hospital within 24-h of hemiparetic stroke were enrolled, of whom 42 completed the study. Patients underwent non-invasive 24-h BP monitoring on days 1 and 7 of hospital admission. Stroke severity on admission was assessed using the Canadian Score. Patients were followed up for between 2-6 years.

Results. Day-night BP differences on day 1 and 7 were 0.4 ± 10.2/2.1 ± 6.1 mmHg and -0.7 ± 12.0/2.5 ± 8.8 mmHg, respectively. Survival analysis revealed a significantly increased chance of dying in patients with increasing nocturnal above daytime BP on day 7 of both SBP (p=0.02) and DBP (p=0.003). Survival curves for patients with low or high Canadian neurological scores on admission were not significantly different. A nocturnal fall (compared to daytime) in nocturnal BP was associated with a reduced chance of death independent of SBP in the Canadian score (hazard ratio 0.26 [95% CI: 0.07-0.99]).

Conclusions. Compared to a fall in nocturnal BP, a higher night-time and daytime BP recorded one week post stroke predicted an increased risk of death independently of initial stroke severity.

APPROPRIATE USE OF ASPIRIN IN PATIENTS AGED >65 YEARS WITH ISCHAEMIC HEART DISEASE (IHD)

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Introduction
It is well established that aspirin has an important role in the treatment of IHD irrespective of age (Br Med J 1994;308:81). It is recommended that aspirin therapy is appropriate in all patients who have IHD in the absence of contraindications (Chest 1989;95:835). The purpose of our study was to assess the appropriateness of aspirin use in in-patients aged > 65 years with IHD.

Methodology
Prescription of non-parenteral GTN was used to identify in patients with IHD. Clinical notes were examined for evidence of contraindications to aspirin therapy, which were based on published literature. Observed prescribing of aspirin in patients with IHD was compared to appropriate prescribing.

Results
Data were collected from 1331 patients in 16 units in Wales & England, of whom 178 were prescribed GTN. No patients were prescribed GTN in unit F.

Figure 1. Percent observed & appropriate co-prescription of aspirin & GTN, of patients prescribed GTN at each unit.

Conclusion
Aspirin, which has the potential to reduce mortality and morbidity in patients with IHD, is being underused in hospital patients aged > 65 years.