above diagnosis. Overall a “positive” diagnosis was made in 59 (57.3%) patients.

**Discussion:** These data suggest that the prolonged head up tilt test and carotid sinus massage can be employed usefully by physicians dealing with elderly patients to investigate the causes of unexplained syncope and falls. In carefully selected patients, as in our study, these tests have a clinically useful yield.

EFFECT OF DIURETIC WITHDRAWAL ON HAEMODYNAMIC CHANGES FOLLOWING AN ANGIOTENSIN CONVERTING ENZYME INHIBITOR IN ELDERLY HEART FAILURE PATIENTS

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**Introduction**

Despite the established benefits of angiotensin converting enzyme inhibitors (ACEI) in heart failure, many patients are still not receiving these drugs. One reason for this is fear of first dose hypotension (FDH) in patients, particularly elderly ones, taking loop diuretics. It has been suggested that withholding diuretics for 24-48h prior to ACEI introduction may reduce the risk of FDH. 

**Methods**

To investigate this, we conducted a double-blind cross-over comparison of FDH following an ACEI (Lisinopril 2.5mg) in patients on loop diuretics (40-120mg of frusemide, or equivalent doses of bumetanide) for heart failure. Twelve elderly patients (over 64 years) were given Lisinopril, on 3 separate occasions, in random order, at least 1 week apart: on usual diuretic, following withdrawal of diuretic for 24h and following 48h withdrawal.

**Results**

Results were analysed using analysis of variance with repeated measures. There were no significant differences overall (p>0.05) between the 3 periods of diuretic withdrawal, in the lowest blood pressure (BP) recorded, the maximum drop in BP from baseline, the time taken for maximum drop in BP to occur and the overall drop in BP in each of the 3 groups (area over the curve).

**Conclusions**

In the population studied, withdrawal of diuretics prior to ACEI introduction did not significantly reduce the risk of FDH. The practice of diuretic withdrawal prior to ACEI cannot be widely recommended.
Results
In hospital only 69% of patients started on ACEI had pre and post ACE BP recorded, 92% had one pre ACEI U&E result and only 66% had any post ACEI U&E. ACEI dose in had increased in 67% of patients, only 14% reached a therapeutic dose pre-discharge. At 18 month follow up: 3 further patients achieved therapeutic dose; 24% had any alteration in ACEI dose: 34% of patients still alive had had no hospital follow up; 16% had no further U&E results communicated to GP, 12% of hospital letters advised GP about dose alteration and 17% on U&E monitoring and 16% of patients had GP initiated U&E done, all of whom had attended hospital clinics. Overall mortality was 20%.

Conclusion
At 18 months only 18% of patients on ACEI reach therapeutic dose as used in trials. Communication is poor between hospitals and GP's regarding ACEI dose titration and renal monitoring.

REFERENCE

MANAGEMENT OF ATRIAL FIBRILLATION IN A GENERAL PRACTICE POPULATION

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Introduction
The prevalence and haemodynamic complications of atrial fibrillation (AF) increase with age. Restoration of sinus rhythm improves effort capacity and reduces embolism but AF has traditionally been managed by rate limiting and antiplatelet therapy. Studies of AF management in hospital reflect varying practices in different specialties. We obtained an overview from a primary care population.

Methods
Setting: Urban health centre group practice of 9935 patients. We reviewed GP and hospital case records for details of demography, echocardiography, medication and attempted cardioversion.

Results
Ninety-two patients (47 male) age 46-90 (mean 73.3 years) had AF confirmed as continuous (70) or paroxysmal (22). Median duration of AF was 3 (0.5-24) years. Overall 46 patients (61%) saw a cardiologist. Referral was more common where AF was rheumatic (93%), non-rheumatic (55%) or paroxysmal (68%), (continuous 59%). Patients managed by non-cardiologists were older (mean 76.1; 54-90 years) and less likely to have echo (57%) compared to patients attending cardiology (72.2; 51-85 years) where echo was obtained in 81%. Echo was performed for 62(79%) patients with non-rheumatic AF. 31 had a structural/functional cardiac abnormality. 22 of those with a normal echo attended cardiology but only 2 underwent electrical cardioversion. In general a wide range of antiplatelet therapy was prescribed. Pharmacological cardioversion, initiated in 11 of 78 patients with non-rheumatic AF, was prescribed more often by a cardiologist or where echo was normal.

Conclusion
Just over half of the AF caseload in this practice was assessed by a cardiologist. Even when echo is normal cardioversion is rarely attempted. Restoring sinus rhythm in patients with AF has major implications for referrals to cardiology and access to echocardiography from primary care.

RSTE DROP PACEMAKERS ARE SUCCESSFUL IN PREVENTING FALLS AND SYNCOPE

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Introduction
A retrospective study of a pacing algorithm -Rate Drop Response (RDR) (Medtronic Thera DR) in patients with Carotid Sinus Syndrome (CSS).

Methods
Between Nov 94 and Dec 95, 499 patients received a pacemaker (PM) at a single centre. 113 patients were paced for CSS (of which 79 patients had Thera DR). 67 CSS Thera DR patients (mean 73 years) were resed (mean follow-up 28 months). Patients had carotid sinus massage (CSM), measurement of postural hypertension performed pre and post PM implant and general health questionnaire.

Results
Pre-implant CSM in those patients who were still symptomatic post pacing revealed no significant difference to those who were cured by PM. Those remaining syncopal had greater postural hypotension compared to those cured post PM (-29mmHg vs 5.5mmHg, p=0.002).

Conclusion
Those patients who felt least improvement in general health had the greatest vasodepressor response to CSM and the greatest postural hypotension at their pre-pacemaker assessment.

The RDR feature has proved an effective treatment for CSS markedly reducing the incidence of syncope, falls, injuries and hospital admissions.

CAUSES AND TREATMENT OF ORTHOSTATIC HYPOTENSION IN OLD ADULTS REFERRED TO A REGIONAL SYNCOPE SERVICE

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INTRODUCTION
Orthostatic hypotension (OH) is defined as a fall in systolic blood pressure of 20mmHg or greater on standing. The causes and outcome of OH in the elderly have not been rigorously described.

METHODS
We have defined the cause of OH and the presenting features in 63 consecutive patients diagnosed with OH following referral to a dedicated regional syncope service. Cardiovascular assessment included phasic measurement of blood pressure and heart rate during a 2 minute morning stand on at least 2 occasions, carotid sinus massage in both the supine and upright positions and a 70° head-up tilt. Autonomic testing was performed on all OH subjects. Normal autonomic function was assumed when at least 3 out 5 tests were normal.