

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 introductions 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

NEUROHORMONAL EFFECTS OF AN ANGIOTENSIN CONVERTING ENZYME INHIBITOR IN ELDERLY HEART FAILURE PATIENTS

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Introduction:

The beneficial effects of Angiotensin Converting Enzyme Inhibitors (ACEI) in heart failure patients are well established. The suppression of angiotensin II production is one beneficial mechanism, but it is postulated that some of the beneficial haemodynamic effects of ACEI result from modulation of other endogenous peptide pathways.

Methods:

As part of a study to investigate the impact of diuretic withdrawal on haemodynamic changes following an ACEI in 12 elderly heart failure patients, blood samples were taken for plasma renin activity (PRA), atrial natriuretic peptide (ANP), vasoactive intestinal polypeptide (VIP) and met-enkephalin (MET) prior to administration of Lisinopril 2.5mg and at 4h post dose. Samples were obtained from each patient on 3 trial periods: no diuretic withdrawal, and following diuretic withdrawal for 24h and 48h.

Results:

Levels of PRA generally rose following ACEI. The change appeared greatest when diuretics were not withdrawn, although the differences did not reach statistical significance ($p > 0.05$). The pattern of change in VIP was less clear, apart from the 24h withdrawal period, when the rise in VIP was significant ($p = 0.039$). There were no significant changes in MET or ANP levels following ACEI.

Conclusion:

Our data support previous reports of a rise in VIP in response to ACEI, which causes vasodilatation. We were unable to demonstrate a significant rise in MET, which one might expect, as enkephalinase is felt to be similar to angiotensin converting enzyme. Previous reports on the effect of ACEI on ANP are conflicting. The influence of ACEI on other endogenous vasoactive systems and their interactions with ANP are not fully understood, and requires further study

ACE INHIBITOR USE - EVIDENCE BASED PRACTICE

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Introduction

The standard treatment for heart failure includes the use of angiotensin converting enzyme inhibitors (ACEI). When used in doses in clinical trials^{1,2} ACEI improve mortality. We examined the initiation, titration and monitoring of ACEI in hospital and community (GP) follow up.

Methodology

Between January and May 1995, 64 inpatients started on captopril or enalapril for heart failure, mean age of 75. Retrospective casenote review of blood pressure monitoring (BP), electrolyte monitoring (U&E), and ACEI dose titration. Review of GP notes (38 traceable) at 18 months gave data regarding dose ACEI, hospital letter content.