Characteristics of Older Patients Attending Accident and Emergency Facilities with Unexplained Falls and an Asystolic Response to Carotid Sinus Massage

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Introduction
The cardioinhibitory subtype of carotid sinus hypersensitivity (CICSH) is a potentially treatable cause of unexplained falls and syncope. It is diagnosed when carotid sinus massage (CSM) produces an asystolic response of 3 or more seconds. Subjects attending Accident and Emergency (A&E) with "unexplained" (no obvious cause) falls often are not investigated for this condition.

Methodology
Subjects aged 65 years or over, who attended A&E with unexplained falls were invited to attend for CSM. CSM was performed sequentially on the right and then left sides, initially supine and then at 70° head-up tilt by a single investigator. CSM was discontinued once CICSH was demonstrated. 41 consecutive patients aged 65 years or over with a cardioinhibitory response are presented.

Results
51% of patients were female, mean age 77 (range 65-89) years, had an average of 1.4 unexplained falls in the previous year and a mean fall duration of 35 months. 63% had no prodrome, 71% had associated loss of consciousness, 59% injurious falls, 10% had a fracture and 24% were admitted as a result of the index fall. 22% had hypertension, 10% previous stroke, 2% previous myocardial infarction, 20% were current and 26% were ex-smokers. 61% were on cardiovascular medications. Head up tilt produced a vasovagal response in 7%, 37% had orthostatic hypotension and 14% had both.

Conclusion
The majority of older patients with an asystolic response who present to A&E with unexplained falls, have no prodrome, deny loss of consciousness and have associated co-morbidity including a resulting fracture in a tenth. Benefit for pacing intervention is unproven in this group but guidelines for management in A&E should highlight possible cardiovascular instability in such patients with unexplained falls.