

**communications
to the
Autumn Meeting
of the
British Geriatrics Society**

**6 to 8 October 2004
Harrogate, Yorkshire**



**programme of
abstracts**

contents

THURSDAY 7 OCTOBER 2004

PLATFORM PRESENTATIONS

4	Health Services Research	[Session A, 09:15 to 10:30]	ABSTRACT BOOK NOS	1-3
5	Respiratory	[Session B, 09:15 to 10:30]		4-6
7	Stroke	[Session D, 11:30 to 12:45]		7-9
9	Clinical Practice	[Session I, 15:45 to 16:45]		10-14

POSTER PRESENTATIONS

12	Bones, Muscles & Rheumatology		ABSTRACT BOOK NOS	15-22
16	Biology & Social Gerontology			23
16	Cardiology			24-27
18	Clinical Effectiveness			28-50
30	Clinical Practice			51-59A
35	Diabetes			60
35	Epidemiology			61-64
37	Falls, Fractures & Trauma			65-74
42	Gastroenterology			75
42	Health Services Research			76-84
47	Incontinence			85-88
48	Neurology & Neurosciences			87
48	Parkinson's Disease			88-89
49	Pharmacology			90
50	Planned Research			91
50	Psychology			92
51	Respiratory			93-96
52	Stroke			97-114
62	Work in Progress			115-120

FRIDAY 8 OCTOBER 2004

PLATFORM PRESENTATIONS

66	Falls	[Session J, 09:00 to 10:15]	ABSTRACT BOOK NOS	121-123
----	-------	-----------------------------	-------------------	---------

N.B. THE INFORMATION PRINTED IN THIS PROGRAMME IS CORRECT AT THE TIME OF GOING TO PRESS.

The abstracts in this Programme have been reproduced directly from wordprocessed files provided by authors; the British Geriatrics Society has no responsibility for the scientific content.

Thursday 7 October 2004

Platform Presentations

Sessions A and B, 9:15-10:30
HEALTH SERVICES RESEARCH
RESPIRATORY

Session D, 11:30-12:45
STROKE

Session I, 15:45-16:45
CLINICAL PRACTICE

1

A RANDOMISED TRIAL EVALUATION OF LOCALITY-BASED COMMUNITY HOSPITAL CARE FOR OLDER PEOPLE

J. GREEN¹, K. MALLINDER¹, S. BOGLE¹, A. FORSTER¹, J. YOUNG¹

Bradford Teaching Hospitals NHS Trust¹ and Aysgarth Statistics²

Introduction

Community hospitals (CHs) are a long-established component of health care provision. There has been recent renewed interest in CHs stimulated by the contraction of the district general hospital (DGH) and the shift towards locality-based health services. This revival is more an opportunistic than an evidence-based development with no previous randomised trial evaluation. We have undertaken a single-masked, randomised, controlled trial to assess the effectiveness of locality-based community hospital care.

Methodology

220 medically stable older patients in need of post-acute care were recruited and randomised to CH or DGH care. Assessments were one week after discharge and three and six months after recruitment. The main outcome measure was the Nottingham Extended Activities of Daily Living Scale (NEADL).

Results

Independence at six months was greater in the CH group than in controls (NEADL adjusted mean difference 5.3; 95% confidence interval 0.64 to 9.96; p=0.026). An explanatory analysis of patients receiving the randomised treatment allocation as intended showed a significant difference between the groups (NEADL adjusted mean difference 5.79; 95% confidence interval 0.70 to 10.89; p=0.026). The NEADL adjusted mean difference for patients who were transferred to the CH within two days was 7.79 (95% confidence interval 1.99 to 13.59; p=0.009). The median length of stay in hospital for both groups was 15 days.

Conclusions

CH post-acute care is associated with greater independence for older people.

2

WHERE DO OLDER PEOPLE DIE?

S. AHMAD AND M.S. O'MAHONY

Department of Geriatric Medicine, University of Wales, College of Medicine, Cardiff

Introduction

Palliative medicine services have invested in the community to support people dying at home. To develop end of life care for older people, we need to know where they die. The aim of this study was to examine trends in place of death, in the last ten years.

Methodology

All Wales death certificates from 1992-2002 were examined. Place of death and age were noted.

Results

Total deaths decreased from 35,826 in 1992 to 32,966 in 2002. The percentage of deaths in hospital increased from 57% to 62% (p<0.001), the community decreased from 26% to 22% (p<0.001) and care homes remained static at 16%. Similar trends were seen for cancer deaths across all ages, percentage deaths in hospital rising from 56% to 62% (p<0.001), and the community falling from 32% to 26% (p<0.001). The percentage deaths in 65-74 year olds dropped from 24.6% to 19.3% and increased from 24.3% to 29.7% in over 85's. The biggest rise in deaths in hospital is in those 85 and over from 49% in 1992 to 56% in 2002, the percentage in the community having dropped from 16% to 12% and in care homes from 35% to 32%.

Conclusion

Those aged over 85 years account for the biggest rise in hospital deaths. End of life needs for older people need to be addressed in hospital and care homes, not just in the community.

3

QUALITY OF LIFE AND ITS
ASSESSMENT IN END STAGE
RENAL DISEASE IN THE ELDERLY

V.J. CLUBB, K.J. McKEE, J. ELVISH, D KENDRAY,
N. CREAMER, M. EL NAHAS, S.P. PARKER

Sheffield Institute for Studies on Ageing, Department of Psychology and the Sheffield Kidney Institute, University of Sheffield and Barnsley and Rotherham District General Hospitals, South Yorkshire

Introduction

Decisions about Renal Replacement Therapy (RRT) in older people depend on concepts of Quality of Life (QoL) and health status. We have investigated measurement of QoL and change with RRT in older people.

Method

1. Structured literature review to identify and characterise existing QoL and health status scales for use in RRT (and with older subjects).
2. Longitudinal survey of people in receipt of RRT over 24 months using the Schedule for the Evaluation of Individual QoL-Direct Weighting (SEIQoL-DW).

Results

58 patients receiving RRT were studied, 30 (10 female) < 60 years (mean 46.4 (SD=9.26)) and 28 (10 female) > 60 years (mean 72.4 (SD=6.96)). QoL domains identified in the literature review differed from those identified by the older patients. No significant differences in QoL scores were found between older and younger patients. QoL scores improved significantly between 6-12 months and 12-24 months ($F(1,35)=10.83$, $p<.001$, $\eta^2=.24$). Older and younger RRT patients nominated different QoL domains as important. The domains of QoL prioritised by older people in receipt of RRT changed with treatment.

Conclusion

Standardised QoL scales used in RRT prioritise different domains than older people in receipt of RRT and cannot measure change in importance of specific domains over time. Use of SEIQoL-DW showed improvement of QoL and change in the relative importance of specific domains in older people in receipt of RRT over 12-24 months.

4

CO-MORBIDITY IN THE ELDERLY
WITH COPD - ITS IMPACT ON HEALTH
SERVICE UTILISATION AND QUALITY
OF LIFE, A COMMUNITY STUDY

J. YEO, A. MENSFORTH, G. KARIMOVA,
A. HILDRETH, SK BANSAL

Geriatrics department, City Hospitals Sunderland, Sunderland

Introduction

Co-morbidity has been shown to be an important consideration in COPD with an estimated prevalence of 84%. In the Netherlands, a weak association between health related quality of life and lung function has been found, with a closer link to co-morbidity.

Methodology

Those aged ≥ 70 ($n=50$) on a general practice's COPD register were invited to participate. The diagnosis of COPD was confirmed with spirometry ($n=27$). Validated questionnaires were administered to assess quality of life (QOL), ADLs, co-morbidity and social support. BTS guidelines were used to determine COPD severity. Health service utilisation was recorded by the number of primary and secondary care attendances in the previous year.

Results

10 had mild, 12 moderate, 5 severe disease. Mean age 76. There was a significant difference in mean ADL scores between moderate and severe groups (13.42 vs 5.20, $p<.05$) and significant negative correlation between severity and number of social contacts ($\rho=-0.446$, $p<.05$). All other variables showed no significant difference between severity groups. There was a significant positive correlation between increasing co-morbidity and poor QOL ($\rho=0.445$, $p<.05$), and significant negative correlation between co-morbidity and ADL scores (scored inversely), $\rho=-0.536$, $p<.05$. Significant negative correlation was found between co-morbidity and primary care attendances ($\rho=-0.406$, $p<.05$) and significant positive correlation between worsening QOL and secondary care attendances ($\rho=0.457$, $p<.05$).

Conclusion

Co-morbidity has an important part to play in COPD assessment, more accurately reflecting QOL in our population. Health service utilisation did not correlate to FEV1 defined COPD severity.

RESPIRATORY

5

FUNCTIONAL DECLINE IN OLDER PATIENTS WITH SEVERE CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

A.M. YOHANNES AND M.J. CONNOLLY

Manchester Metropolitan University, and Department of Geriatric Medicine, University of Manchester

Introduction

Little attention is given to impact of COPD on functional status in older patients. Aims: To investigate impact of COPD on change in functional status in older patients originally admitted with COPD exacerbation (AECOPD).

Methodology

100 patients discharged after admission with AECOPD (Other data previously reported Yohannes 2003, Int. Psychogeriat. Association). Of these 36 died in one-year follow-up. We followed the surviving 64 (30 men), aged 60-98 (mean 72) years. Manchester Respiratory Activities of Daily Living (MRADL) questionnaire was used to assess physical disability (Yohannes 2000; JAGS 48: 1496). Subjects received optimum medical therapy and regular outpatient review. All were prospectively followed for one year.

Results

40 (63%) questionnaire responses were received, of those 5 were uncompleted. Baseline mean (SD) FEV₁ = 0.84 (0.3) litres. Baseline MRADL score versus 12 months MRADL score = 11.4 vs. 7.9, (t=4.36, p<0.0001). Factors predicting most rapid decline in ADLs were male gender, (t=2.68, p=0.01), number of packs-years smoked (t=2.68, p=0.01), smoking status (t=2.36 p=0.01) and low baseline MRADL (t=5.54, p<0.0001). 10% of the variance was explained by male gender, 3% by smoking status, 2% by number of pack years smoked and 35% by low baseline MRADL. Total adjusted R²= 0.51.

Conclusion

Functional status declines rapidly after AECOPD admission. Functional disability level predicts "slippery slope" decline. Functional decline is also associated with male gender, pack-years and active smoking.

6

RANDOMISED CONTROLLED STUDY OF INHALER TECHNIQUE USING AUTOHALER, ACCUHALER OR HANDIHALER DEVICES

D. HARGROVES, P. DIGGORY, J. VIGUS

Department of Elderly Care Medicine Mayday University Hospital Croydon

Introduction

Adequate inhaler technique (IT) is essential to deliver inhaled therapy. Elderly people often have difficulty using inhaler devices. We aimed to see which of three devices were superior.

Methodology

One hundred, (38 male, 62 female; age 71-97, mean 83.8 years) medically stable, inhaler naive patients were recruited from the EC wards and randomly allocated placebo Autohaler, Accuhaler or Handihaler devices. After tuition, patient IT was assessed by observation, immediately and reviewed after 24 hours. Five aspects were considered: Loading/priming; exhaling to residual volume; hand/ breath co-ordination; breath holding for 10 seconds; and awareness that the inhaler was empty. Each was scored: 0 for poor; 1 for moderate; and 2 for perfect technique giving a total score 0 to 10.

Results

At Review mean total score was significantly greater (p< 0.001) for Autohaler than Accuhaler or Handihaler devices.

Inhaler	Mean total scores	Number	Mean Diff	P
Autohaler	Initial 6.54	29		
	Review 7.25	28	0.71	0.125
Accuhaler	Initial 7.14	43		
	Review 5.24	42	-1.90	<0.001
Handihaler	Initial 7.36	28		
	Review 5.25	28	-2.11	<0.001

For individual aspects of IT: Review Autohaler mean scores were significantly (p<0.0001) better for loading/Priming but significantly (p=0.003) worse at awareness device empty than Accuhaler or Handihaler.

Conclusion

The Autohaler is superior to Accuhaler or Handihaler devices. It had advantages for loading/priming but many patients were unable to tell when the device was empty.

7

THE FOOD TRIAL - RESULTS OF THE TRIAL COMPARED WITH SENIOR CLINICIANS' EXPECTATIONS

M. DENNIS, S. LEWIS, G. CRANSWICK, J. HUNTER
FOR THE FOOD TRIAL COLLABORATION

*Dept of Clinical Neurosciences, University of
Edinburgh, Western General Hospital, Edinburgh*

Introduction

The FOOD Trials aimed to establish the effects of different feeding policies for stroke patients on outcomes. We aimed to establish the likely impact that the trial results might have on clinical practice.

Methodology

Prior to completion of the trial, we asked senior clinicians to estimate the likely absolute size and direction of the effect of routine oral supplements (vs normal diet), early enteral tube feeding (vs avoid) and PEG (vs NG) on the proportion of patients dying or severely disabled.

Results

226 physicians responded. Their estimates (median & interquartile range) and the actual trial results were as follows: 2.0% (0.6 to 5.0) absolute reduction in poor outcome with supplements compared with an actual 0.7% increase (95% CI -2.3 to 3.8). A 3.8% (1.2 to 8.3) decrease in poor outcome with early tube feeding compared with an actual 1.2% decrease (95% CI -4.2 to 6.6). A 2.5% (0.2 to 6.4) decrease in poor outcome with PEG compared with an actual 7.8% (96%CI 0 to 15.5) increase.

Conclusion

The FOOD trial results with respect to the effects of oral supplements and early tube feeding are roughly in line with expectations and thus are likely to re-enforce current feeding practices. However, we have shown a major difference with respect to the effects of PEG feeding which should translate into a decreased use of PEG early after stroke.

8

UNDER-REFERRAL OF ELDERLY PATIENTS WITH TIA AND ISCHAEMIC STROKE FOR CAROTID IMAGING: A POPULATION BASED STUDY

J.F. FAIRHEAD, M.F. GILES, P.M. ROTHWELL

*Stroke Prevention Research Unit, Radcliffe Infirmary,
Oxford, UK*

Introduction

Benefit from carotid endarterectomy for symptomatic carotid stenosis increases in the elderly due to their high risk of stroke on medical treatment. The prevalence of significant carotid stenosis increases with age. However, whether elderly patients are routinely referred for carotid imaging is uncertain.

Methodology

We compared referral rates in our population-based TIA and stroke incidence study (Oxford Vascular Study - OXVASC - population=90,873) with those in the rest of Oxfordshire (population = 589,903) by clinical indication. Data were collected on all referrals for carotid ultrasound, MRA, CTA or angiography for one year in the two populations using computerised and written records from all imaging centres.

Results

The two populations were similar in age, sex and deprivation score. 205 patients with TIA or ischaemic stroke were scanned in OXVASC compared with 650 from the rest of Oxfordshire. Compared with OXVASC referral rates, the observed rate in patients with TIA or stroke in the rest of Oxfordshire was reduced (RR=0.49, 95%CI=0.42-0.57, p<0.001), especially in patients aged ≥80 years (0.35, 0.25-0.47, p<0.001). The observed incidence of symptomatic stenosis in the rest of Oxfordshire was lower in the ≥80 age group (0.25, 0.11-0.53, p<0.001).

Conclusion

Our data suggest that many elderly patients with TIA or ischaemic stroke are not referred for carotid imaging despite the high prevalence of carotid stenosis in this age group and the proven benefit of surgery.

**EXERCISE TRAINING FOR OLDER
CHRONIC HEART FAILURE PATIENTS -
A RANDOMISED CONTROLLED TRIAL**

M.D. WITHAM, J.A. GRAY, I.S. ARGO,
D.W. JOHNSTON¹, A.D. STRUTHERS¹,
M.E.T. MCMURDO

*Section of Ageing and Health and Dept of Clinical
Pharmacology¹, Ninewells Hospital, University of
Dundee and Dept of Psychology², University of
Aberdeen*

Introduction

Older patients with comorbid disease have been excluded from trials of exercise training for chronic heart failure. We examined whether a seated exercise programme designed for older, frail people with heart failure could improve exercise capacity and health status.

Methodology

Patients aged 70 years and over with systolic heart failure were recruited from outpatient clinics. Subjects were randomised to receive usual care or to participate in a twice weekly group exercise programme for 3 months followed by home exercise with telephone support for 3 months. Six minute walk test, triaxial accelerometry, disease-specific quality of life, functional profile, anxiety, depression and morale were measured at baseline, 3 and 6 months.

Results

82 patients were randomised, mean age 80.5 (SD 5.0). Overall attendance rate was 82.7%. 31/41 (75.6%) of patients attended at least 80% of their allocated sessions. There were no adverse events attributable to exercise. Six minute walk did not change significantly between the two groups; accelerometer readings showed a significantly greater increase in daily activity at 6 months in the exercise group (median 2.3% vs -14.0%, $p=0.036$). Depression, anxiety, morale and quality of life scores were not significantly affected by the intervention.

Conclusions

This exercise intervention led to significant increases in daily activity. Exercise capacity and health status did not change significantly. Further work is needed to optimise the effectiveness of exercise training programmes for this group of patients.

**HOW MUCH DO HEALTH CARE
PROFESSIONALS KNOW ABOUT
HERBAL AND ALTERNATIVE
MEDICINES?**

D.G. MARANTOS, C.G. DIMOPOULOS AND
F. THOMSON

*Department of Medicine for the Elderly, Hull and East
Yorkshire Hospitals NHS Trust, Hull*

Introduction

Herbal and Alternative Medicines (H&AM) are commonly used and widely available on the high street. However, some preparations are associated with severe side effects or interact with prescribed medication.

Methodology

Health Care Professionals (HCP) were asked to complete a questionnaire to assess their knowledge of various H&AM prior to an educational session on the topic. The questionnaire contained 20 true/false statements in 2 equal sections. Section 1 tested knowledge of common H&AM and their indications. Section 2 tested side effects and interactions. Each section was allocated 10 marks.

Results

54 HCP completed the questionnaire: 45 doctors (16 Consultants, 6 Registrars, 11 SHO's, 3 PRHO's and 9 non-training grades), 8 nurses and 1 pharmacist. Most HCP (52, 96%) were aware of H&AM use in the community, but personal use was low (6,11%). Just 11(20%) HCP considered H&AM to be 'safe' but only 10 (8 consultants) regularly enquired about their use.

The average scores (max = 10) for Sections 1 and 2 were:

	Section 1	Section 2
Consultants	2.7	2.0
Registrars	4.7	2.3
SHO's	2.2	2.3
HO's	4.0	1.3
Non-training grades	1.9	1.5
Other staff	1.8	1.1

The substances people knew most about were garlic and glucosamine (47 and 39 correct answers respectively).

Conclusion

Locally HCP of all grades appear to know very little about H&AM. Sessions on H&AM should be incorporated into existing medical education programmes. A re-audit is planned.

11

USE OF ALTERNATIVE AND HERBAL MEDICINES BY HOSPITALISED ELDERLY PATIENTS

C.G. DIMOPOULOS, D. MARANTOS, F. THOMSON

Department of Medicine for the Elderly, Hull and East Yorkshire Hospitals NHS Trust, Hull

Introduction

Use of "herbal" and "alternative" medication (H&AM) has increased hugely. Older people are particularly at risk of drug side effects and interactions and often have multiple conventional prescriptions. Our clinical governance survey was undertaken to assess the extent of H&AM use and its documentation in medical notes.

Methodology

A simple questionnaire was used by two researchers to discern the use of H&AM. 166 in-patients for more than 48 hours in the Medical Elderly and Orthogeriatric wards were surveyed (99 female, age range 53-98 years). Documentation of H&AM use in hospital records was noted. Patients too physically and/or mentally frail to participate were excluded.

Results

A large minority (76, 46%) confirmed the regular use of H&AM (60% female). Sixty-one (37%) had at least 3 co-morbid conditions, requiring prescribed medication, 36(60%) took H&AM. 100(60%) of all patients had at least 3 conventional prescriptions and 52 were also taking at least one H&AM. Hospital records reflected only one enquiry in conventional clerking about H&AM - patient with hypercalcaemia. Locally, the commonest H&AM is Cod Liver Oil (75%).

Conclusion

We too seldom enquire about the use of H&AM and it is rare for such information to appear in hospital notes. Our survey confirms that the use of such agents is common in the elderly. Polypharmacy may be an indicator of likely H&AM use.

12

THE NUTRITIONAL STATUS OF 1081 ELDERLY PEOPLE RESIDING IN PUBLICLY FUNDED SHELTER HOMES IN PENINSULAR MALAYSIA

R. VISVANATHAN¹, A. ZAITON², M.S. SHERINA², Y.A. MUHAMAD²

Department of Geriatric and Rehabilitation Medicine¹, Royal Adelaide Hospital, South Australia and Department of Community Health², University Putra Malaysia, Selangor

Introduction

Under-nutrition is associated with increased morbidity and mortality. The prevalence and predictors of nutritional risk as evaluated by the 'DETERMINE Your Nutritional Health Checklist' (NHC) in Malaysian shelter homes were determined in this study.

Methodology

1081 elderly people (58.55%M) over the age of 60 years (mean age 71.80 ± 0.23 [SEM]) were surveyed.

Results

41.35% (n=447) were nourished [score <3], 32.10% (n=347) at moderate risk [score between 3 and 5] and 26.55% (n=287) were at high risk of under-nutrition [score>5] according to the NHC. A large proportion of subjects were underweight with 14.30 % of subjects recording a very low body mass index (BMI) ≤18.5kg/m². The residential geriatric depression score [GDS-12R] (Relative Risk [RR] = 1.03 [95% CI 1.01-1.04]; P =0.007) and the number of medical illnesses (RR = 1.12 [95% CI 1.06-1.18]; P< 0.0001) were found to be independent predictors of nutritional risk (NHC score ≥ 3). Using a BMI < 18.5 kg/m² as an objective marker for nutritional risk, the NHC was shown to have a sensitivity and specificity of 66.4% (95% CI 58.3-73.7%) and 42.7% (95% CI 39.4-46.0%) respectively.

Conclusion

Elderly people residing in publicly funded shelter homes in Malaysia may be at-risk of under-nutrition and many are under-weight. The NHC can be used as an awareness tool in Malaysia but is not a good screening tool.

13

THE EARLY ORIGINS OF BODY COMPOSITION IN OLDER MEN: FINDINGS FROM THE HERTFORDSHIRE COHORT STUDY

A. AIHIE SAYER, H.E. SYDDALL, E.M. DENNISON, H.J. GILBODY, S.L. DUGGLEBY, C. COOPER, D.J.P. BARKER, D.I.W. PHILLIPS

MRC Epidemiology Resource Centre & University Geriatric Medicine, University of Southampton

Introduction

Size in early life is related to adult body mass index and it has been proposed that early environmental influences have lifelong consequences for obesity. However body mass index also reflects fat-free mass and few studies have examined the relationship between early size and direct measures of body composition in older people. The objective of this study was to investigate the relationship between birth weight, weight at one year and body composition in older men.

Methodology

We carried out a retrospective cohort study in Hertfordshire, UK. 737 men born between 1931 and 1939 with records of birth weight and weight at one year participated in the study. The main outcome measures were adult body mass index, fat-free mass and fat mass.

Results

Birth weight was significantly and consistently positively associated with body mass index ($r=0.12$, $p<0.01$) and fat-free mass ($r=0.26$, $p<0.001$) but not with the measures of adult fat mass. In contrast, weight at one year was associated with fat-free mass ($r=0.33$, $p<0.001$) and adult fat mass ($r=0.13$, $p<0.001$).

Conclusion

The consistently reported positive relationship between birth weight and adult body mass index may reflect prenatal and maternal influences on fat-free mass rather than fat mass in older people. The postnatal environment may be more influential in the development of obesity in later life.

14

APPLICATION OF A MODIFIED FRESNO TEST FOR SPECIALIST REGISTRARS IN GERIATRIC MEDICINE: EVALUATING SKILLS AND COMPETENCE IN EVIDENCE-BASED MEDICINE

K. ALI, C. HYDE, A.J. SINCLAIR

University of Warwick, on behalf of the West Midlands Specialist Registrars in Geriatric Medicine

Introduction

The practice of evidence-based medicine (EBM) is becoming more prevalent in many specialities. However, studies have shown that geriatricians, do not use the available evidence in clinical-decision making. An explanation may be lack of training in EBM skills, and absence of a suitable test of competence. The Fresno test was developed to assess a wide range of skills in EBM (Ramos KD, et al. BMJ 2003; 326: 319-321). It is reliable and valid for detecting the effects of formal tuition in EBM.

Methodology

Using the template of the Fresno Test, we modified its questions to reflect clinical practice in geriatrics. The questions included formulating a focused clinical scenario, definitions of statistical terms, identifying types of clinical trials and levels of evidence. Model answers were developed. Sixteen specialist registrars, at different stages of training, with varying exposure to EBM practice, took the test under examination conditions. The answers were anonymised and analysed by the authors individually.

Results

The scores were:

Year of training	Number of registrars	Scores in percentages (maximum score 100%)
1	6	13,16,17,20,24,48
2	3	24,36,38
3	3	25,35,39
4	3	18,23,28
5	1	38

The mean score was 27.6%.

Conclusion

In this West Midlands study, there was a significant lack of EBM skills observed among registrars in geriatric medicine. This issue is important and training in EBM needs to be addressed in both regional and national programmes.

Thursday 7 October 2004

Poster presentations

BONES, MUSCLES & RHEUMATOLOGY
BIOLOGY & SOCIAL GERONTOLOGY
CARDIOLOGY
CLINICAL EFFECTIVENESS
CLINICAL PRACTICE
DIABETES
EPIDEMIOLOGY
FALLS, FRACTURES & TRAUMA
FALLS, FRACTURES & TRAUMA
GASTROENTEROLOGY
HEALTH SERVICES RESEARCH
INCONTINENCE
NEUROLOGY & NEUROSCIENCES
PARKINSON'S DISEASE
PHARMACOLOGY
PSYCHOLOGY
RESPIRATORY
STROKE
WORK IN PROGRESS

N.B. Please note that abstract number 67 has been withdrawn

15

HAND HELD DYNAMOMETRY OF SUPINE QUADRICEPS STRENGTH: ASSESSMENT OF VALIDITY

16

WITHDRAWN

H.GILBODY¹, V.YULE², H. SYDDALL¹, S.CRAIGHEAD¹, E. DENNISON¹, C.COOPER¹, A. AIHIE SAYER^{1,3}

MRC Environmental Epidemiology Unit¹, School of Health Professions & Rehabilitation Sciences², University of Southampton and University Geriatric Medicine³, University of Southampton

Introduction

Lower limb muscle strength is an important determinant of physical function in older people. However, measurement in epidemiological studies has been difficult because of the requirement for large-scale equipment. A new protocol using an inexpensive hand-held dynamometer (HHD) has been developed to measure quadriceps strength in a supine position. The aim of this study was to assess its validity compared to the gold standard Biodex System II Dynamometer.

Methodology

Supine quadriceps strength was measured twice with each of the Biodex and the HHD, in 20 men and women aged 61-81 years on their non-dominant leg. The agreement between the peak torques obtained by the Biodex and HHD was analysed using a Bland-Altman analysis and Kappa coefficient.

Results

The mean peak Biodex and HHD results were 83.4Nm (SD 28.0) and 68.9Nm (SD 19.6) respectively. The HHD under-measured quadriceps strength on average by 14.5Nm (95%CI 8.5,20.6) compared to the Biodex, but there was good correlation between the measures ($r=0.91$, $p<0.0001$). Classification of individuals into tertiles of muscle strength showed good agreement between the two methods (Kappa=0.70, $p<0.0001$).

Conclusion

Our findings suggest that HHD using a supine technique underestimates absolute quadriceps strength compared to the Biodex but is a useful tool for ranking muscle strength of older people in epidemiological studies. It may also be of value for objective assessment of physical function in the clinical setting.

17

INCREASED INSULIN RESISTANCE IS STRONGLY ASSOCIATED WITH DECREASED PHYSICAL QUALITY OF LIFE IN ELDERLY SUBJECTS FROM THE HERTFORDSHIRE COHORT STUDY

P. AMBERY², S.R. CROZIER¹, H.E. SYDDALL¹, E.M. DENNISON¹, A. AIHIE SAYER^{1,2}, D.I.W. PHILLIPS¹, C. COOPER¹

Hertfordshire Cohort Study group¹, MRC Epidemiology resource centre, University of Southampton and Dept of Geriatric Medicine², Southampton University³

Introduction

The association between Type 2 diabetes and decreased quality of life (QoL) scores has been well documented. Insulin resistance (IR) is a key factor in the pathogenesis of both cardiovascular disease and Type 2 diabetes. In this study we assess the impact of increasing IR on QoL scores in patients yet to develop or with previously unknown Type 2 diabetes diagnosed at screening review.

Methodology

SF-36 scores were collected on 1,310 subjects from the Hertfordshire cohort between 1998 and 2002. Quartiles of HOMA-R (an assessment of IR) were determined. Odds ratios (OR) for being in the lowest fifth of each SF-36 domain per increase of one quartile of IR were calculated.

Results

High IR was associated with poorer Physical Functioning (PF), Role-Physical and General Health Perception domains. The OR for poor PF was 1.56 per quartile of IR (95%CI 1.37, 1.78), P<0.001. There were similar relationships with Vitality and Bodily Pain, but not with the Role-Emotional, Social Functioning or Mental Health (MH) domains (OR for poor MH was 1.04 per quartile of IR (95%CI 0.92, 1.17), P=0.53).

Discussion

This study suggests that increased morbidity associated with IR translates into significantly decreased physical QoL. This underlines the importance of early recognition of IR, so that intervention may prevent or delay subsequent morbidity burden and reduced physical QoL.

18

PREVALENCE OF VITAMIN D DEFICIENCY IN PATIENTS WITH ESTABLISHED OSTEOPOROSIS AND THE USE OF ADJUNCT CALCIUM AND VITAMIN D WITH BISPHOSPHONATES

R YAZDANI¹, I. MORGAN¹, O. SAHOTA¹, P. SAN², D.J. HOSKING²

Dept Elderly Medicine¹, University Hospital, Division Mineral Metabolism², City Hospital, Nottingham,UK

Introduction

In patients with established osteoporosis, vitamin-D levels should be adequate before starting antiresorptive therapy. Market research indicates that the high prevalence of vitamin-D insufficiency in the elderly may not be recognised amongst clinicians and co-prescribing of supplements with antiresorptive agents is seldom practised.

Methodology

To assess the prevalence of vitamin-D insufficiency in the community-dwelling elderly with vertebral osteoporosis, serum-25OHD was measured together with other biochemical and dietary markers of calcium homeostasis. The proportion of bisphosphonate prescriptions issued in 2003 that were co-prescribed with calcium/vitamin-D for the same indication on the same day were evaluated from the IMS Health UK Medical-Data Index [MDI].

Results

392 subjects, mean age 76.2yrs (range 70-84) was evaluated. The prevalence of hypovitaminosis D was 37.9% with marked seasonal variation, mean difference 21.9%(95%CI 11.1, 31.9; p=0.031). Mean daily dietary vitamin-D intake was 3.3mcg, with a modest correlation between intake and serum 25OHD (r = 0.38;p=0.023). Mean dietary calcium intake was 811mg. The MDI data showed a co-prescription of 15.3%.

Conclusion

The presence of hypovitaminosis-D in the community-dwelling elderly with established vertebral osteoporosis is high. Dietary intake is poor and is correlated with serum 25OHD. Adjunctive use of calcium/calcium and vitamin-D with bisphosphonates is low in the UK. In view of these findings and extrapolating bisphosphonate clinical trial data, adjuvant calcium/calcium and vitamin-D therapy must be considered with bisphosphonates in patients with osteoporosis.

19

**FACTORS AFFECTING BONE STATUS
IN HIP FRACTURE PATIENTS**

C. CONNOLLY, M.C. CASEY, J. MIRANDA,
N. MAHER, N. FALLON, E. THORNTON,
C. CUNNINGHAM, D. COAKLEY, J.B. WALSH

*Falls and Osteoporosis Unit Mercers Institute for
Research in Ageing, St James Hospital, Dublin*

Introduction

Elderly subjects are at high risk of Osteoporosis and Vitamin D deficiency. Future fracture risk may also be indicated by elevated biochemical bone markers or the presence of a vertebral fracture (Vfx). This study reports the prevalence of these factors in hip fracture patients.

Methodology

50 patients (>65y) admitted with a hip fracture underwent DXA and lateral spine assessment. Osteocalcin (OC) C-telopeptide (CTx), Parathyroid Hormone (PTH), 25(OH) D were performed within 48 hours and Creatinine Clearance (Cr/Cl) estimated. Osteoporosis was defined as a T score of < -2.5 at the hip or spine.

Results

The mean age was 79.2±1.2 (SEM)years (11m and 39fm). The mean T-score at the hip and spine were (-2.6±0.2 and -2.3±0.3 respectively). Mean OC was 23±1.8 ug/l (range 11-50), CTx was 0.66±0.04 ng/ml (range 0.01-0.50), PTH was 41.5±4.3 pg/ml(15-65), 25(OH)D was 15.7±1.2 ng/ml(hypovitaminosis D defined as < 25 ng/ml). Most patients were in moderate chronic renal failure (CRF) with a mean Cr/Cl of 48±2.9 mls/min. 22% of patients had Vfx.

Conclusion

Elderly hip fracture subjects suffered from both osteoporosis and hypovitaminosis D. In addition there was evidence of uncoupled bone turnover with increased bone resorption and moderate renal impairment. 25% of Vfx occurred in osteopaenic patients indicating the value of Lateral Vertebral Assessment to stratify patients management.

20

**THE EARLY BIOCHEMICAL RESPONSE
OF ELDERLY PATIENTS WITH
OSTEOPOROSIS TO PARATHYROID
HORMONE THERAPY**

M.C. CASEY, C. CONNOLLY, M. HEALY, M. LAM,
N. MAHER, C. KIRBY, C. CUNNINGHAM,
D. COAKLEY, J.B. WALSH

*Falls and Osteoporosis Unit Mercers Institute for
Reserach in Ageing St James Hospital Dublin*

Introduction

Parathyroid Hormone (PTH) therapy has recently become available as the first licensed anabolic treatment for severe osteoporosis. Most of the published literature to date has reported on the biochemical and densitometric response of younger populations (less than 65 years) to this treatment. This study investigates the early biochemical response to parathyroid hormone therapy in an Older population.

Methodology

30 patients ≥79 ± 4 years (SD) were consecutively studied. Biochemical markers of bone formation Osteocalcin (OC) and P1NP measured in addition to the bone resorption marker C-Telopeptide (CTx). These markers were measured at baseline and three months post PTH.

Results

After three months therapy, the level of Osteocalcin (OC) has risen from 17.7 ± 2.2 to 59.3 ± 4.8 (ref 11-50 ug/l, p<0.0001) a similar increase was noted in P1NP from 26.8 to 103 (ref 15-80 ng/ml, p<0.002). CTx rose from 0.21 ± 0.04 to 0.60 ± 0.11 (ref .01-.50ng/ml, p<0.002). The patients' endogenous PTH dropped from a baseline level of 30.7 to 17.0 (ref 15-65pg/ml, p<0.0003). No significant differences in serum or urinary calcium were noted

Conclusion

Elderly patients with severe osteoporosis exhibited a striking biochemical bone response to parathyroid hormone therapy. Bone turnover was markedly increased and predominately in the bone formation markers both of which rose by over 300%. These findings indicate that suitable elderly osteoporotics are likely to benefit enormously from recombinant parathyroid hormone therapy.

21

ONE THIRD OF PATIENTS WITH HIP FRACTURES HAVE NORMAL OR OSTEOPAENIC BONE MINERAL DENSITY

D.J. ROBINSON, O. GERAGHTY, F. NAAZ, C. KIRBY, M. HEALY, E. THORNTON, C. WALSH, M.C. CASEY, D. COAKLEY, C. CUNNINGHAM, J.B. WALSH

Dept. of Medicine for the Elderly, St James' Hospital, Dublin 8, Ireland

Introduction

Osteoporosis is associated with increased risk of fracture at hip and other sites, with significant associated morbidity. Known risk factors for this disease include female sex, increased age, and low body mass index. Identifying other risk factors might help with health promotion and avoiding unnecessary hospitalisation.

Methodology

589 patients were reviewed during the study period (M=118, age 19-100). Lateral vertebral morphometry and dexta scanning were performed using a Lunar Prodigy Vision. 231 (39.2%) had osteoporosis (T-score <-2.5 at hip or spine), and there were 63 patients with history of hip fracture identified.

Results

Of those patients with hip fracture, 40 (63.5 %) were osteoporotic, 17 (26.9%) osteopaenic and 6 (9.5 %) had normal bone mineral density. The two groups displayed the following characteristics:

	Osteoporotic (n=40)	Osteopaenic/ Normal (n=17)	p-value
Age	79.86	81.24	p=0.5811
Male	13 (32.5 %)	10 (43.5%)	p=0.4245
Cr Clearance	43.8	52.05	p=0.1590
Vertebral Frac	16 (40%)	5 (21.7 %)	p=0.1723

Conclusion

A substantial proportion (36.5%) of patients with hip fracture had normal or osteopaenic bone mineral density. We did not identify how these patients differed from osteoporotic patients with hip fracture. Fractures in this osteopaenic or normal group may be due to a difference in bone quality rather than bone mineral density.

22

PREVALENCE OF OSTEOPOROSIS AND VERTEBRAL FRACTURES IN ELDERLY DAY HOSPITAL PATIENTS

O. GERAGHTY, D.J. ROBINSON, M.C. CASEY, M. HEALY, E. THORNTON, C. WALSH, C. CUNNINGHAM, D. COAKLEY, J.B. WALSH

Dept of Medicine for the Elderly, St James' Hospital, Dublin 8, Ireland

Introduction

Vertebral fractures are the most common fracture. They cause functional disability and are associated with increased mortality. They are predictive of other fractures. This study details the prevalence of these fractures and identifies common risk factors.

Methodology

102 consecutive day hospital patients were recruited for bone densitometry with lateral vertebral morphometry. Vertebral fractures were defined according to semiquantitative technique. Bloods were taken for measurement of Osteocalcin, (OC, n=15-50µg/ml), C Telopectide (CTX, n=0-0.5ng/ml), Parathyroid hormone (PTH n=15-65pg/ml), and 25(OH)Vitamin D (20-40ng/ml).

Results

The prevalence of Osteoporosis was 44%. The mean age was 79.32+/-7.39 years. Factors associated with an increased risk of vertebral fracture (VF) were lower spine T score (-2.1 versus -1.2, p<0.05) An association between worsening renal impairment and increasing age was noted but these were not significant. Vertebral fractures were equally prevalent in males and females n=10 and n= 21 respectively. There were no significant differences between the mean OC, CTX, and vitamin D levels in the VF group and the non-VF group. Mean vitamin D level of the population indicated hypovitaminosis. Both CTX and OC were highly negatively correlated with hip BMD r=-0.45, p<0.001 and r=-0.41, p<0.001. Only CTX correlated with spine BMD p<0.05.

	Vertebral fractures	Total
Osteoporosis	18	45
Osteopaenia	10	42
Normal	2	15
Total	31	102
P		

Conclusion

Over half of the Day hospital population had a high risk of future fracture with either established osteoporosis or osteopaenia in addition to vertebral fractures. Renal impairment, advanced age were more common in these patients.

23

OLDER PEOPLE'S ATTITUDE
TOWARDS ORGAN DONATION

D. MANAWADU AND L. KELLAHER

University of London, King's College, London

Introduction

Organ donation can improve the quality of life. Demand for organs is greater than their supply. Older organs are being used to increase the number of donors. No studies exist on older people's attitudes towards organ donation in the United Kingdom.

Methodology

A convenience sample of 18 people over 60 underwent taped interviews using an open approach. Content analysis of the transcripts was performed. This qualitative approach was used to determine attitudes towards organ donation and underlying beliefs.

Results

The median age of the sample was 69 (range 63 to 89). Although the sample was in general support of organ donation, their lack of relevant knowledge led them to theorise about the usefulness of older people's organs for donation. They believed that society held discriminatory attitudes towards older people and viewed ageing in a negative way. They incorporated these beliefs internally so that they assumed their organs too, were of little value. This weakened their intention to donate.

Conclusion

Older people are a possible source of organs for donation. The sample interviewed felt less valued as they grew older and perceived ageist attitudes from society. Ageism can be a barrier to the donation of organs by older people. Education as to the value of older people in donating their organs is needed. Education is also needed to root out age discrimination.

24

DROUP OUT PREDICTORS IN
OUTPATIENT CARDIAC
REHABILITATION PROGRAMME

A. YALFANI, A.M. YOHANNES AND C. BUNDY

*University of Manchester and Manchester
Metropolitan University*

Introduction

Cardiac rehabilitation (CR) improves physical activity and quality of life in patients with cardiac problems. Factors associated with early drop-out of patients from CR are unclear. Aims: We prospectively investigated the prevalence and predictors of early drop-out of cardiac patients in six-week outpatient CR programme.

Methodology

189 (129 male) cardiac patients mean age 61 years, range 36-84 from consecutive series of outpatient referrals were recruited to 6-weeks comprehensive CR programme. Quality of life was assessed by the Quality of Life Myocardial Infraction questionnaire (QLMI), and depression was screened using the Hospital Anxiety Depression (HAD) scale and illness representation examined by the Illness Perception Questionnaire (IPQ).

Results

147 (109 male) patients mean age 61 years completed the CR programme. 42 (22%) patients mean age 58 years were early drop-out in the first 3 weeks of the CR programme. Factors predicting early drop-out of patients from the CR programme were: female gender odds ratio (OR)=5.59, $p<0.003$) and age (OR=0.94, $p<0.002$), HAD score (OR=1.48, $p<0.0001$) consequences (OR=0.61, $p<0.0001$) and cure/control (OR =0.51, $p< 0.0001$). QLMI was not a predictor of early drop-out.

Conclusion

Over one-fifth of cardiac patients did not complete CR programme. Female patients five times most likely to drop-out from CR programme. Psychological distress, younger age and lower perceptions of symptoms of controllability/curability of illness perception were predictors of early drop-out. Patient supporting scheme during CR is worthy of investigation.

25

**POSTPRANDIAL HYPOTENSION
PREDICTS MORTALITY IN OLDER,
LOW-LEVEL CARE RESIDENTS**

A. FISHER, M. DAVIS, W. SRIKUSALANUKUL,
M.M. BUDGE

*Department of Geriatric Medicine, The Canberra
Hospital and Australian National University, Canberra,
ACT, Australia*

Introduction

The relationship of prognosis in older adults to abnormal haemodynamic responses to meal intake and postural change is unclear. We investigated the association between hypertension (HT), pulse pressure (PP), postprandial hypotension (PPH), orthostatic hypotension (OH) and mortality in low-level care residents.

Methodology

In a prospective, 56-month follow-up study of 179 residents [mean age 83.2 ± 7.0 (SD) years; 80% females] the baseline BP, PP, PPH and OH were correlated with total and cardiovascular mortality. Baseline BP (lying, standing 1 and 3 minutes) and pre- and 1 hour post meal intake were recorded.

Results

At baseline 49% of participants had HT, 23% OH, 38% PPH and the PP was ≥ 70 mmHg in 29%. During follow-up 53.9% of residents died (48 cardiovascular deaths). Total mortality was significantly related to PPH (OR=2.35; 95% CI 1.2-4.6; $p<0.01$), but not to HT (OR=1.3; CI 0.7 - 2.5; $p=0.4$), OH (OR=1.45; CI 0.7-3.1; $p=0.4$) or PP ≥ 70 mm Hg (OR = 0.8; CI 0.3-2.4; $p=0.4$). PPH significantly correlated with HT and PP (both $p<0.001$). However, the presence of PPH, OH, HT or high PP was not related with subsequent cardiovascular mortality. A 46% increase in risk of all-cause mortality was noted with PPH (RR=1.46; CI 1.1-1.9; $p=0.001$).

Conclusion

In older low-level care residents, no relationship existed between HT, OH, PP and mortality. PPH was a strong predictor of death in this cohort.

26

**ANTIHYPERTENSIVES - ARE SOME
WORSE THAN OTHERS?**

L.. BURTON, M. NORTON, J.L. NEWTON

*Falls and Syncope Service, Royal Victoria Infirmary,
Newcastle*

Introduction

Ageing is associated with increased blood pressure and diminished baroreflex sensitivity that predisposes to orthostatic hypotension (OH), syncope and falls. It is a balance between maintaining control of high blood pressure and aggravating hypotensive symptoms. Anecdotally some antihypertensives appear to be more culprit than others but there is little literature to guide clinicians.

Methodology

Review of consecutive hypertensives attending a falls and syncope unit. Those with a hypotensive tendency were identified. Medications with potential to lead to hypotensive side effects were reviewed.

Results

385 hypertensives were identified. 127/385 had one or more hypotensive disorders (33%) (84(66%) female, mean age 74 (range 42-89). Presenting symptoms: Falls 37(29%), syncope 62(49%), dizziness 69(54%), drop attacks 9(7%), presyncope 28(22). 35% had IHD and 22% CVD. 12 (9.5%) had sustained fracture during an event and 19(15%) soft tissue injury. Median number of potentially culprit medications 2 (range 1-5). Of the 127 patients 56(44%) were diagnosed with VVS, 56(44%) with OH, 45(35%) VDCSH. In 61 (48%) on stopping or reducing potentially culprit medication symptoms improved, implying that symptoms were partly or entirely due to the medication. This was more likely if the medication was a diuretic or an alpha-blocker rather than ACE inhibitors ($p=0.002$).

Conclusion

This study suggests that some antihypertensive medications may be less suitable in those with a hypotensive tendency than others. A randomised controlled trial in this specific group is needed.

CARDIOLOGY

27

TOLERABILITY OF BETA-BLOCKERS IN OLDER PEOPLE WITH CHRONIC HEART FAILURE IN CLINICAL PRACTICE

M.P. TAN, A. SPENSLEY, J. OLIVER, N. MAJMUDAR,
J. BAXTER

*Department of Care of the Elderly, University of
Newcastle-upon-Tyne, Sunderland Royal Hospital*

Introduction

Since the publication of the landmark trials, beta-blockers have become established treatment for heart failure. The Beta-blocker withdrawal rate in CIBIS-II, MERIT-HF and COPERNICUS was 15%. The mean age of subjects in these trials was 61-64 years. Our previous study [Baxter et al, Heart 2002] on a small number of subjects in a research environment, demonstrated a withdrawal rate of 31% in patients aged 70 and over. We are now reporting the beta-blocker tolerability of older people attending our heart failure service.

Methodology

We analyzed prospective data from 318 consecutive, unselected patients attending our local heart failure service over two years.

Results

253 (69.5%) patients aged 69 to 100 (mean age=80) had documented left ventricular systolic impairment. 25% were already taking a beta-blocker. Beta-blocker therapy was deemed to be contraindicated in 21%. 4% had a previous history of beta-blocker intolerance. Initiation of bisoprolol or carvedilol was planned in 109/253 (43.1%) patients. Follow-up data was available for 69/109 (63.3%) patients. The treatment failure rate was 39% (27/69). The mean dose of bisoprolol or carvedilol achieved, expressed as percentage maximal dose, was 66.4%. 47.6% achieved target dose.

Conclusion

We were unable to commence beta-blocker therapy in 25% of our heart failure patients. Beta-blockers are less well tolerated in older people in actual clinical practice than in trials involving younger subjects. Once tolerated, doses comparable to clinical trials can be achieved.

CLINICAL EFFECTIVENESS

28

THE PREVALENCE OF PAIN ON CARE OF THE ELDERLY WARDS

A.M. DIACK, C.J. TURNBULL

Wirral Hospitals

Introduction

The prevalence of pain increases with age, figures varying widely, dependent on the population sampled. Studies in the community indicate a prevalence of 66-80%. There is little data on in-patients. Our aim was to study both the prevalence of pain and the use of analgesics in an acute hospital setting.

Methodology

Data was collected from case-notes and drug charts of in-patients on 5 care of the elderly wards, and a questionnaire was completed by those able.

Results

There were 115 patients (33% male, 67% female) with a mean age of 85.3 years. 74 (64%) were prescribed analgesics (34% regularly, 73% PRN) during their hospital stay. 67% of regular and only 0.12% of potential PRN doses were given. 59(51%) patients were able to complete the questionnaire; reasons for non-completion were confusion (AMTS<7) (75%), altered conscious level (9%), refusal (2%), asleep (5%), aphasic (2%) or absence from the ward (7%). 28 (47%) said they had experienced pain during their admission and 75% of these were prescribed analgesia. The most common source of pain was musculoskeletal problems. Only 38% of those prescribed both regular and PRN analgesia received any PRN doses.

Conclusion

In our population of patients nearly half had experienced pain during their admission. Although most were prescribed analgesics they were often not given. Further work needs to be done to look at the efficacy of analgesia use.

29

DOCUMENTATION OF COMMUNICATION WITH THE NEXT OF KIN OF DYING PATIENTS

S.N. CHANDRATRE, R. JONES, D. PONNUSAMY, F.U. HASSAN

Dept.of Elderly Medicine Calderdale Royal Hospital, Salterhebble, Halifax, West Yorkshire

Introduction

The need for good communication skills between health care professionals and the relatives of dying patients has been highlighted in the National Health Service Cancer plan 2000 and the National Institute of Clinical Excellence (NICE) guidelines recommend that the outcome of consultations be recorded in patients' notes. The aim of this study was to look into the documentation of discussions held with the relatives of dying patients.

Methodology

A retrospective analysis of 100 case notes of patients who died in our hospital was done using a questionnaire which asked specific questions about the documentation of consultations.

Results

This study showed that the consultant had spoken to the relatives only in one third of patients. In 11 patients there were no documentation of discussions.78% of discussions were held prior to death and in 11 % after death. The diagnosis was offered in 71% of cases, treatment and prognosis explained in 60%. The resuscitation status was documented in 80%. Majority of case notes had no documentation whether the relatives were satisfied. Surprisingly the cause of death was not documented in nearly one third of patients.

Conclusion

Documentation of communication with relatives is inadequate as evidenced by this study. Keeping adequate clinical records is an essential part of good medical practice and hence documentation of discussions with relatives of patients especially in the final stages of life is of paramount importance.

30

REFERRAL PATTERNS TO IN-PATIENT PALLIATIVE CARE SERVICES: IS THERE AGEISM OR DISEASE DISCRIMINATION?

J.V. BUTLER¹, R. HUBBARD¹, M. LEWIS², A. BYRNE², K.W. WOODHOUSE¹

Department of Geriatric Medicine & University of Wales College of Medicine¹, Llandough Hospital² Department of Palliative Care Medicine, Llandough hospital

Introduction

It is the right of every person with a life-threatening illness to have access to specialist palliative care/SPC (W.H.O 1991). There is evidence of ageism in cancer management. We hypothesised that there is ageism in referral patterns to SPC and that Non-cancer patients are less likely to be referred.

Methodology

A Retrospective audit of in-patient SPC referrals in Llandough hospital from April '02- March '03 against All Wales Minimum Standards (1999) was performed. We compared mean age of death with mean age of referral and referral frequency between cancer and non-cancer patients.

Results

770 deaths were examined, of which 204 (26.5%) were cancers. 422 referrals to SPC were made, of which 386 (91.5%) were cancers. Mean age of referral to SPC vs. death are shown:

SPC Referral/ Death	Mean	Range	SD	p value
Cancer Referrals		72.51	18-95	11.86
Cancer Deaths		73.46	18-97	12.67
Non-Cancer Referrals	78.50	46-94	11.52	ns
Non-Cancer Deaths	79.39	20-101	12.50	ns
Total Referrals		73.02	18-95	11.93
Total Deaths		77.82	18-101	12.81

SPC referral to death ratio was 1.89 for cancers and 0.064 for non-cancers, giving an Unadjusted Odds Ratio of 29.53 (p<0.001).

Conclusion

Patients referred to SPC were significantly younger than those who died with similar diseases. Age related differences likely reflect disease patterns rather than ageism. There is a significant difference in SPC referral frequency between cancer and non-cancer disease.

CLINICAL EFFECTIVENESS

31

DIFFERENCES IN PROVISION OF RESUSCITATION EQUIPMENT: SURVEY OF ACUTE HOSPITALS

L. HOGH, I. KANE, A. BHALLA AND M. WARD

Department of Geriatric Medicine, St Helier Hospital, Carshalton, Surrey

Introduction

There are wide variations amongst British hospitals in patient survival after cardiopulmonary resuscitation (CPR), with the best outcomes achieved in accident and emergency (A&E) and coronary care (CCU). Our aim was to see how equipment provision of resuscitation trolleys in care of elderly (COE) wards compared with other clinical areas.

Methodology

The equipment in randomly selected resuscitation trolleys in all 14 South West Thames Hospitals was surveyed. The 'gold standard' for equipment was taken from the document 'CPR Guidance for Clinical Practice and Training in Hospital'. The items were divided into four groups: airways equipment, circulation equipment, drugs and immediate access. A Kruskal Wallis analysis of variance was used to compare the percentage of equipment present on each trolley in six different clinical areas; A&E, CCU, COE, medical, surgical, obstetric and gynaecology (O&G) wards, expressed as a mean with standard error.

Results

There was a significant difference in circulation equipment present ($p=0.004$), with the highest score in A&E (mean $59\% \pm 6.03$). The lowest scores were seen in O&G wards (mean $30\% \pm 4.27$) but COE wards also scored poorly (mean $39.4\% \pm 3.7$). There were significant differences in the percentage of drug items present ($p=0.001$). The best being CCU (mean $91\% \pm 2.04$), with the lowest scores in O&G (mean $65.8\% \pm 3.4$), surgical (mean $66\% \pm 4.3$) and COE wards (mean $66\% \pm 2.77$). There was no significant difference in provision of airways equipment ($p=0.24$) or immediate access items ($p=0.55$).

Conclusion

We have shown poor provision of equipment in many clinical areas including COE wards. Our results suggest the need for all hospitals to review the procedures for ensuring adequate provision of resuscitation equipment in all clinical areas.

32

HYPERNATRAEMIA IN ELDERLY HOSPITALISED PATIENTS

I. MALIK¹, E. AHERN², A. POORSAN²,
M.A. AL-JUBOUR², A. CAPEWELL²

Whiston Hospital, St Helens & Knowsley Hospitals Trust

Introduction

Hypernatraemia ($NA^+ > 150$ mmol/L) is a common disorder in elderly hospitalised patients, associated with high morbidity and mortality. The objective of this study was to examine the demographic characteristics and outcome of older patients admitted with hypernatraemia.

Methodology

We conducted a retrospective hospital-based study of hypernatraemia using laboratory data to identify patients. 47 patients >65 years were identified over a 6 month period. We recorded the following data from clinical case notes: (i) Gender (ii) Age (iii) Pre-admission residence (iv) Source of admission (v) Number and type of medications on admission (vi) Mean length of stay (vii) Cognitive impairment (viii) Outcome

Results

62% of patients were female. 38% of patients were male. Mean age = 82 years. 60% were admitted from Nursing Homes (NH), 36% from their own homes (H) and 4% from Residential Homes (RH). The majority, 85%, were admitted through Accident and Emergency (A&E). The mean lengths of stay (days) were 16 (NH), 4.5 (RH) and 37 (H). The mean number of medications on admission were: 5 (NH), 7 (RH) and 5.7 (H). 17% were on benzodiazepines, 14.8% on anti-psychotics and 40.5% on diuretics. 40.5% of patients had history of cognitive impairment. Overall mortality was 64%; NH (68%) and H (51%).

Conclusion

Hypernatraemia is associated with increased morbidity and mortality. Further study of hypernatraemia should explore the possibility of earlier recognition and treatment in order to improve outcome.

33

MANAGEMENT OF SCABIES
IN NURSING HOMES

E. AHERN¹, Z. DIXON², R. MORGAN²

*Department of Medicine for the Elderly Wirral
Hospitals NHS Trust*

Introduction

The incidence of scabies is increasing and outbreaks are common in nursing homes. Scabies infection causes considerable morbidity and management of outbreaks is complex and expensive. This study was conducted to estimate the prevalence of scabies in nursing homes and to identify difficulties with diagnosis and treatment.

Methodology

Postal questionnaires were sent to 57 Nursing Homes in the Wirral region identified from the Care Home Directory 2002.

Results

60% of nursing homes responded. Outbreaks of scabies occurred in 32%. Transmission of infection to staff occurred in 73%. A Consultant Dermatologist was required for diagnosis +/- advice in 64% of homes. Topical malathion was administered in 45% and permethrin in 82%. In one home oral ivermectin was prescribed. In 36% more than one treatment was required and in 64% more than one application was required. In 82% of homes all residents and staff were treated. Residents and staff were treated simultaneously in 91%. Bed linen and clothes were treated in 82%. Delays in treatment were reported in 27%. The regional Public Health team were involved in 55%. 55% of all respondents would favour guidelines to manage outbreaks of scabies.

Conclusion

Scabies infection is a common problem in nursing homes for both residents and staff. Delays with administering treatment and treatment failures were observed. Most nursing homes would favour guidelines to ensure prompt diagnosis and treatment and hence control outbreaks.

34

IMPROVEMENT IN ORAL HYGIENE IN
OLDER PATIENTS FOLLOWING
INTRODUCTION OF GUIDELINES AND
PROVISION OF FREE STERADENT

J. TSANG, F. FOX, R. MORGAN

*Department of Medicine for the Elderly, Arrowe Park
Hospital, Wirral NHS Trust*

Introduction

Maintaining oral hygiene may be difficult for older patients in hospital. We have undertaken a study to determine whether guidelines for oral hygiene and provision of free Steradent can improve oral hygiene.

Methodology

Ethical approval was obtained from the Wirral Ethics Committee. In 2002, 158 older patients (mean age 84) on acute medical wards were interviewed using a questionnaire. Following the introduction of guidelines and free Steradent, a further 100 patients (mean age 83) were interviewed in 2003/4. All patients scored >7/10 on an abbreviated mental test score.

Results

In 2002, 32% [51 patients] reported a current problem with their oral cavity, of which 49% [25 patients] had not reported it. Most wore dentures 91% [144], of whom 43% [62] used Steradent but some reported using just water, 24% [35] and the remainder, water and toothpaste. 50% of those patients who reported using just water to clean their dentures were experiencing oral problems. In 2003/4, fewer patients reported experiencing problems with their mouth 22% [22] and 78% [78] reported using Steradent to clean their dentures with only 5% using just water.

Conclusion

Many older in-patients experience problems with their oral health. Guidelines and provision of free denture cleaners can improve their oral hygiene. Poor oral hygiene will lead to oral discomfort and reduced nutritional intake with its consequent affect on morbidity and mortality

CLINICAL EFFECTIVENESS

35

A PRACTICAL NURSE-LED DIABETES REVIEW TOOL FOR THE ELDERLY HOUSEBOUND OR IN RESIDENTIAL AND NURSING HOMES

S. WILSON, P. BAKER

Pikes Lane Medical Centre, Bolton and Royal Bolton Hospital, Bolton

Introduction

The elderly housebound, especially in residential settings, are known to lack the routine organised diabetes care designed for the rest of the population. Surveying Bolton district nurses, domiciliary podiatry and dietetics, and homes themselves (2001) found 546 patients, 171 unknown to the register. The remainder had poor data quality e.g. 11% had nothing, 44% none within 18 months. Despite efforts to increase collection, 2004 analysis found reduced numbers. The priority therefore became a systematic review tool usable by community nursing staff.

Methodology

A new assessment template was piloted by 14 district nursing teams on diabetics known to them, receiving little or no organised diabetes care. None had previous full diabetes review. Evaluation was by staff questionnaire.

Results

Feedback response rate was 45%. Comments included; Positives: Users felt the information was sufficient and understandable. The documents were felt to be clear, logical, valid and usable. Negatives: Some assessments in this group were difficult e.g. weighing immobile patients, height/BMI measurements. General comments about the forms, more space needed, etc. Nursing assessment times were 45 - 90 minutes, without prior venepuncture or later co-ordination, referral, discussion, data entry, etc.

Conclusion

Full diabetes review is practical for non-specialist nursing staff in this setting. Ongoing work includes strategies for reliable inclusion of such patients onto the district register, staff training, protocols to underpin the strategy and continued audit. There are significant time resource implications.

36

EVALUATING DIABETES CARE IN THE FRAIL ELDERLY - DO DAY HOSPITALS HAVE A ROLE?

C. CARROLL, A.E. HINTON, R.F. LOGAN

Department of Elderly Care, Queen Alexandra Hospital, Cosham, Portsmouth

Introduction

The Diabetes National Service Framework aims to deliver a comprehensive diabetes service. Elderly people experience problems accessing appropriate care, especially screening activities. Few studies have investigated the quality of diabetes care in the elderly. Our aim was to establish the quality of diabetes care for elderly people attending Portsmouth District Day Hospitals.

Methodology

Diabetic patients were identified from lists of attendees at four Portsmouth District Day Hospitals, between April 2002 - February 2003. Diabetes-related information was gathered from patients' hospital notes, the hospital computerised database, and telephone interviews with primary care clinicians. The local Diabetes Advisory Group, DRIVE Guidelines were used to define diabetes targets.

Results

80 patients (mean age 78.6 yrs) were identified. 47 received diabetes care from primary care; 19 had secondary care input; day hospitals did not provide diabetes-specific care. The average HbA1c was 7.23%. 46.3% (37/80) were above a target blood pressure (140/85) despite medication. Only 61.3% (49/80) had documented evidence of regular eye screening, with many patients being left to organise this themselves. 23.8% (19/80) had no documented evidence of regular foot screening.

Conclusion

Shortfalls in achieving diabetes targets in the elderly were demonstrated. Day Hospital can offer opportunist assessment. We have now adopted a simple nurse-led diabetes checklist for all diabetic patients, ensuring that basic diabetes screening is performed.

37

ECONOMIC EVALUATION OF
COMMUNITY HOSPITAL CARE
FOR OLDER PEOPLE

J. O'REILLY, K. LOWSON, J. YOUNG, A FORSTER
AND J. GREEN

*York Health Economics Consortium, Bradford
Hospitals NHS Trust and Department of Health Care
for the Elderly, St Luke's Hospital*

Introduction

The aging UK population is placing mounting pressures on health and social services. Intermediate care is one means of alleviating these pressures. This study conducted an economic evaluation of intermediate care in a community hospital (CH).

Methodology

The economic evaluation was based on a randomised controlled trial of 220 patients allocated to remain in a district general hospital (DGH) following an admission (n = 79) or transfer to a CH (n = 141). The follow-up period was 6 months. The study was performed from the NHS and social services perspectives. Health outcomes were measured using quality-adjusted life years (QALYs). Resource utilisation was captured using a questionnaire administered to patients prospectively at 3 time periods. Costs were obtained from local and national sources. Differences in outcomes, resources and costs were investigated using non-parametric tests.

Results

At 6 months, the mean (SD) QALYs were 0.3751 (0.3434) and 0.3451 (0.3426) for the CH and DGH groups respectively. The mean (SD) cost per patient was marginally lower in the CH group (£7,162 (£5,207)) compared to the DGH group (£7,469 (£6,549)). There were no statistically significant differences in QALYs or costs between the groups. The incremental cost-effectiveness ratio was -£10,233.

Conclusion

CH care is a feasible alternative to treatment in an acute setting since the former resulted in similar health outcomes and costs to DGH care.

38

FALLS AWARENESS IN A PRIMARY
CARE POPULATION:
A SCREENING EXERCISE

C.P. WILKINSON, J.J. WHITAKER, P.A. JONES,
C. STORY, H. LAW, G. DYKE, A.G. BYNOE

Harrogate District Hospital

Introduction

Prevention of falls is an important part of the National Service Framework for Older People. A third of over 65's fall annually. However, not all patients who fall, or who are at risk of falling, seek help. It is important to identify these patients, to coordinate appropriate preventive action. We have looked at prevalence and awareness of falls, dizzy spells and blackouts in a primary care population. We evaluated contact with the elderly at the flu vaccination as a screening opportunity.

Methodology

Subjects aged 65 years and over attending a single general practice for flu vaccination were given leaflets on falls prevention and osteoporosis and asked to complete a short questionnaire, highlighting falls history and the presence of dizzy spells or blackouts. For positive responders the medical records were reviewed, to determine the level of awareness of the problems reported. Information about numbers of medications, previous fracture history and the use of bone protection was recorded.

Results

1606 elderly patients attended for vaccination, 76.3% of practice population over 65. Of these, 847 (52.7%) returned the questionnaire (40.3% of target population). 143 patients reported falls, dizzy spells or blackouts, but there was documentation of these problems in the medical records of only 19 patients. The screening exercise highlighted 124 patients (5.9% of the total elderly practice population) who were falling or at risk of falling who had not been previously identified.

Conclusion

Fallers are not well recognised or documented at present in primary care. The contact with the elderly at the time of the flu vaccination is a useful screening opportunity which could be developed.

CLINICAL EFFECTIVENESS

39

TOO MUCH INFORMATION - TOO LITTLE COMMUNICATION?

P.A. REEVE, J.L. NEWTON

*Falls and Syncope Service, Royal Victoria Infirmary,
Newcastle upon Tyne*

Introduction

The Falls and Syncope Service specialises in the investigation of falls and blackouts. Our team is dedicated to the delivery of high quality patient-centred care, and recognise that patient satisfaction is our primary responsibility. An audit was undertaken to gain patients' views, opinions, level of understanding and satisfaction with the information they received before and during their first appointment.

Methodology

To assess the current situation a patient satisfaction questionnaire, seeking patients' views on information received, was posted out to 100 new patients following their appointment (pre-intervention group). The results led to the development of new patient documentation which was posted, with the questionnaire, to the next 100 new patients prior to their first appointment (post-intervention group).

Results

Pre-intervention, 37% of patients would have liked more information, compared to 55% of patients post-intervention! Three per cent pre- and 5% post- found information upsetting. This process has ensured consistency and standardisation of patient centred, user-friendly documentation which is tailored to the needs, circumstances and wishes of individuals.

Conclusion

This audit has drawn our team's attention to the fact that some patients are keen for information, whilst others may find it upsetting. Patients consistently commented on the need for appropriate verbal communication in addition to written information. What we must ensure is that written communication does not replace our ability to communicate verbally and we must keep talking!

40

AGEING RENAL TRANSPLANT POPULATION - INCREASED NEED FOR TARGETTED FALL RISK FACTORS INTERVENTION

C.W. FAN, M.C. CASEY, N. MAHER, O. GERAGHTY,
M. HEALY, C. WALSH, C. CUNNINGHAM,
D. COAKLEY, G. MELLOTTÉ, J.A.B. KEOGH,
J.B. WALSH

*Falls/Osteoporosis Unit, Mercer's Institute for
Research into Ageing, St James Hospital Dublin,
Department of Nephrology, AMNCH and St James
Hospitals, Dublin, Ireland*

Introduction

Ageing transplant recipients experience the same physiological changes that predispose older persons to falls. Furthermore, prolonged gluco-corticoid therapy will exacerbate any visual impairment and proximal myopathy. Anti-hypertensive medications may worsen orthostatic hypotension (OH). We investigate the prevalence of falls-related risk factors in this population.

Methodology

47 patients ≥ 50 years were randomly selected from a renal transplant list. Measurements of Falls Risk include Chair stand, Tandem Stand and Walk, Visual Acuity using Snellen Chart, refractive error (pinhole technique), postural BP, physical activities, DEXA findings, previous falls, fractures and medication history.

Results

Mean (s.d.) age was 62.8(6.7) years; 28 men, 30(64%) < 65 years old. Nineteen (40%) patients had impaired tandem walk, 8(17%) had impaired tandem stand (eyes open) and 19(40%) (eyes closed). Twenty (43%) patients demonstrated OH. Thirty-three (70%) patients had visual acuity = 6/9, 19(40%) patients had refractory errors. Thirteen (28%) patients spent ≤ 4 hours a day on their feet. Six were on current benzodiazepines therapy, 6 had previous falls and 22(47%) previous fractures. Fourteen (30%) patients had osteoporosis.

Conclusion

The prevalence of falls risk factors was comparable to non-renal patients who were 20 years older (mean age of 80 years) (Dargent-Molina, Lancet 1996). Ageing renal patients demonstrated orthostatic hypotension, balance and visual impairment. There is a need for comprehensive multidisciplinary assessment and intervention of fall risk factors in this patients group.

CLINICAL EFFECTIVENESS

41

MANAGEMENT OF GLUCOCORTICOID INDUCED OSTEOPOROSIS IN OLDER PEOPLE

E. AHERN¹, Z. DIXON², N. SATHI¹, M. GEORGE¹

Department of Rheumatology & Department of Medicine for the Elderly Wirral Hospitals NHS Trust

Introduction

In December 2002 Royal College of Physicians (RCP) issued guidelines for prevention and treatment of glucocorticoid induced osteoporosis. The aim of this study was to review the management of older people on long-term oral glucocorticoid therapy.

Methodology

104 patients, > 65 years, were identified who had been discharged from an in-patient episode on long-term oral glucocorticoids. We retrospectively recorded the following data: (i) Demographics (ii) Maintenance dose (iii) Condition requiring treatment (iv) Bone Mineral Densitometry (BMD) (v) Type of osteoporosis preventative treatment (vi) Lifestyle modification advice (vii) Fracture history

Results

70% of patients were female. The majority of patients were on long-term glucocorticoid for Rheumatology (51%) and Respiratory (26%) conditions. 21% of patients were on no treatment and 20% on treatment as dictated by RCP Guidelines. 13.5% had BMD. Few patients received diet or exercise advice. 15% of patients were smokers and smoking cessation advice was documented in 62.5%. 20% of patients had past history of fracture: Colles (3%), Hip (6%), Vertebral (6%), Other (6%)

Conclusion

The majority of older patients were on long-term glucocorticoid therapy for Rheumatology and Respiratory conditions. A significant number of patients were not on the appropriate preventative treatment. Only a minority of patients received lifestyle modification advice. Because of increased risk of fractures in older people this group need to be targeted for appropriate treatment.

42

PRIMARY FALLS PREVENTION

O. KHAN, R. GOODLAND

Elderly Care Department, Yeovil District Hospital, Yeovil

Introduction

Falls in older people are a major public health concern as recognized by the NSF for older people. Recent research demonstrates that falls can be prevented. This research has been appraised and used as the basis of evidence based guidelines for falls prevention in older persons. We designed a simple audit to see whether these guidelines have had any impact on our current practice. All people over the age of 70 should be asked about any falls over the past year.

Methodology

We selected 200 cognitively intact medical inpatients over the age of 70 from hospital admission database. These patients were admitted for reasons other than falls. They were clerked by medical SHOs, house officers or staff physicians. 93 were referred by GPs and the rest were admitted through A&E or electively. The average age was 79.95 were males and 105 females. Medical notes were reviewed by a senior day hospital sister and an elderly care specialist registrar.

Results

Only seven patients were asked about any history of falls in the past one year as proposed by combined American and British geriatric society falls prevention guidelines.

Conclusion

The application of falls prevention guidelines in clinical practice could detect potential fallers and allow initiation of multidisciplinary assessment and intervention. There is an urgent need to increase awareness of these guidelines among healthcare practitioners working with older people through proper education and training.

CLINICAL EFFECTIVENESS

43

BETA BLOCKERS IN OLDER PATIENTS WITH HEART FAILURE

A. MICHAEL AND G. MATHARU

Queen's Hospital, Burton

Introduction

Mortality associated with moderate to severe congestive heart failure (CCF) may exceed that associated with many malignancies. There is strong evidence from systematic reviews that adding Beta Blockers (BB) to standard treatment in people with heart failure (HF) increases the ejection fraction, and reduces the combined risk of death or hospitalization. Use of BB in older patients with HF was audited in a British District Hospital.

Methodology

Medical records of 105 consecutive patients with discharge diagnosis of CCF or left ventricular failure were reviewed. Diagnosis was confirmed by echocardiography. Patients with good echocardiographic left ventricular function, or who died within 7 days were excluded.

Results

68 eligible patients aged 65 - 95 years (mean 80) were studied. 14/68 (21%) were given BB. 18/68 (26%) had contraindications to BB. Of the 50 patients who did not have contraindications, 19 (38%) were not given BB with justification. However 17/50 (34%) were not prescribed BB with no obvious reason. In the absence of contraindications, BB were not prescribed for patients who had one or a combination of: dementia, nursing home residency, multiple pathology, poor mobility and falls, frailty, or terminal illness. In these situations BB could be inappropriate, without benefit, or even harmful. It would be helpful if guidelines were present. 34% of patients without contraindications were not prescribed BB without obvious reasons. This is a significant proportion that could have benefited from adding BB.

Conclusion

Guidelines need to be implemented and tailored to suit the particular circumstances of some older old patients. It is essential to increase awareness of the evidence of the benefit of BB in CCF. BB should be considered in all HF patients unless there is a contraindication.

44

UNRECOGNISED NOCTURNAL HYPERTENSION IN OLDER PATIENTS

A. RAVINDRANE

Queen Alexandra Hospital, Portsmouth

Introduction

Ambulatory 24hr blood pressure monitoring (ABPM) is increasingly used in clinical practice. Patterns of hypertension recognised in the elderly include white coat and nocturnal hypertension. Non-dipping and high nighttime systolic blood pressures are strong independent predictors of cardiovascular mortality. Nocturnal hypertension often goes unrecognised. We analysed the ambulatory BP recordings of 80 older patients.

Results

55% of the 80 patients (14 men, 66women, mean age 80) who had ABPM were above 80 years old. 43 patients (54%) had postural symptoms. 82.5% of the patients were on antihypertensive agents. 78(97%) had a clinic blood pressure of more than 160mmHg. Clinic blood pressure predicted ambulatory blood pressure (Pearson correlation=0.471, p-value <0.0001). 75% of patients had a mean 24hour systolic blood pressure greater than 135mm and the systolic load was >50% in 82.5%. Isolated systolic hypertension was the commonest diagnosis (64%); Only 3 patients (3.75%) had white coat hypertension. But 79%(63 patients) had nocturnal hypertension (mean night time systolic BP>125mmHg). 40% (25/63) of those with nocturnal hypertension had normal 24 hour systolic BP (134.5mmHg). 36% did not have a nocturnal dip in their BP. 55% of the nocturnal hypertension went unrecognised.

Conclusion

In our patients nocturnal hypertension was ignored because of postural symptoms (54%) and normal 24hour mean (40%). Treating nocturnal hypertension may be particularly difficult. Studies are required to see whether reducing nighttime BP reduces cardiovascular risk.

45

CAN OLDER PERSONS WITH HEART FAILURE TOLERATE A REHABILITATION PROGRAMME?

46

WITHDRAW N

J. OLIVER, R. POLLARD, T. RUMFITT AND A.J. BAXTER

Departments of Cardiology and Geriatric Medicine, University of Newcastle-upon-Tyne, Sunderland Royal Hospital

Introduction

The NSF for Coronary Heart Disease (2000) and NICE guidelines for chronic heart failure (CHF) suggest that CHF patients should be offered rehabilitation. The aim of this study was to see if a group of elderly CHF patients are able to complete a multidisciplinary rehabilitation programme.

Methodology

Patients were recruited from a secondary care CHF clinic. All had NYHA class 3-4 symptoms stable for over 4 weeks, echo proven LV systolic dysfunction, and were on optimum medical therapy. Patients with cognitive impairment were excluded. Patients attended 2 hour therapy sessions a week apart over 8 weeks, consisting of education, exercise, counselling and group work. Each completed a 6-minute walk test, Hospital Anxiety and Depression scale (HAD), SF36 and Guyatt heart failure symptom scale at the beginning and end of the 8 week course.

Results

25 consecutive patients were screened, 19 patients fulfilled inclusion criteria, 14 agreed to take part, mean age 77 (range 69 to 86). There were no withdrawals. All patients completed both sets of assessments. There were no improvement in both the 6-minute walk test and the assessment scales.

Conclusion

Older persons with stable heart failure attending a CHF clinic in secondary care are able to attend and complete an intensive CHF rehabilitation course. A larger study is required determine more accurately patient selection criteria and if CHF rehabilitation improves symptoms in older persons.

CLINICAL EFFECTIVENESS

47

DELAY IN HOSPITAL ASSESSMENT OF PATIENTS WITH ACUTE STROKE: IS THROMBOLYSIS AN OPTION?

H. BREWER, H. CHANT, M. FAWZY, D. MITCHELL AND K. NEUBAUER

Southmead Hospital, North Bristol NHS Trust

Introduction

Prompt hospital attendance is necessary for thrombolysis to be a treatment option for acute ischaemic stroke. We aimed to determine the proportion of patients assessed at this hospital in time to consider thrombolysis and factors leading to delay in the current system.

Methodology

Patients diagnosed with a stroke January 2002 to June 2002 were identified and notes reviewed. Time from onset of symptoms to hospital assessment, then type of transport and prior involvement of general practitioners (GPs) were recorded. Differences between groups were tested by Chi-squared.

Results

n=125
53 (39.5%) were assessed by a hospital doctor <3 hrs, 9(6.7%) 3-6 hrs, 26(19.4%) 6-24 hrs and 27(20.1%) >24 hrs. [10/125 had inadequate documentation of times] 55 (48.2%) had seen a GP, of whom 14 (25.5%) were assessed at hospital <3 hrs and 41(75.5%) >3 hours. 59 (51.8%) did not see a GP, 39 (66.9%) assessed <3 hrs and 20 (33.9%) >3hrs, (p<0.005, 95% CI = 0.241 to 0.575). [1/115 unclear GP input] 90 (78.2%) were transferred by ambulance, of whom 48 (53.3%) were assessed <3 hrs, 42 (46.6%) >3hrs. 17 (14.8%) used alternative transport, 5 (29.4%) assessed <3 hrs and 12 (70.6%) >3hrs, (p<0.10, CI = -0.007 to 0.263). [8/115 no transport recorded]

Conclusion

Approximately one third of patients attend this hospital in time for consideration of thrombolysis. Transfer by ambulance, without primary care assessment, may increase the proportion of patients with acute stroke for whom thrombolysis would be a potential treatment.

48

EXPANDED ROLE OF STROKE NURSE IN NEW TIA SERVICE

R.D.T SMITH

Department of Elderly Medicine Whiston Hospital

Introduction

We audited our service model for new 'Transient Ischemic Attack' clinic. After assessing patients referred to the service, the stroke nurses arranged for secondary preventative measures. If their assessment failed to confirm cerebrovascular event, physician review was sought. Otherwise the physicians reviewed patients when the investigations are complete. Identifying referrals not confirming to cerebrovascular event is important.

Methodology

100 consecutive assessments by the nurses in the year 2002-2003 were audited retrospectively. Diagnosis made by stroke physician was the standard and the need for investigations were interpreted based on it.

Results

42% of the referrals were assessed within one week of the referral and 81% in a fortnight. 8% reviewed in their home. Diagnosis of cerebrovascular event was rejected in 20% of assessments by the nurses and 35% by the physicians

	Physicians	Nurses
Both agree not a TIA	18	18
Physicians N/Nurses Y	17	0
Physicians Y/Nurses N	0	2
Total	35	20

Y=diagnosis of event N= reject a diagnosis

7 of the 48 [14%] carotid dopplers and 4 of 54 [7.4%] echocardiograms were deemed inappropriate. 16 of the 48 Dopplers [33.33%] were done within 3 months.

Conclusion

Though the nurses were inclined to investigate more referrals, investigations were used judiciously. There was improvement in waiting time for all aspects. A TIA service driven by the nurses could be ideal for achieving timely management in some district general hospitals

49

STROKE UNITS REPLICATED IN REAL LIFE. RESULTS FROM THE NATIONAL AUDIT ENGLAND, WALES AND NORTHERN IRELAND

A.G. RUDD, A. HOFFMAN, P. IRWIN, D. LOWE AND M.G. PEARSON

Clinical Effectiveness and Evaluation Unit, Royal College of Physicians, London

Introduction

The 2001 National Sentinel Audit of Stroke in England, Wales and Northern Ireland provided data on organisation and process of care in 95% of hospitals treating acute stroke. Only 36% of 8200 patients were admitted to a stroke unit. This study reports the impact of stroke unit care on outcomes with analyses at patient and hospital level. At hospital level, national audit data is compared with Department of Health 30 day stroke mortality data.

Methodology

The audit methodology has been previously described. Multiple regression models were used to investigate the association between DoH mortality data and audited stroke care adjusting for casemix. The R² statistic was used to quantify the proportion of variability in mortality explained by stroke care, by case-mix, and by stroke care in addition to case-mix.

Results

Mortality from the DoH data correlated with mortality obtained in the audit (Spearman correlation 0.28, p<0.01). Hospitals with higher proportions of patients going to a stroke unit had lower mortality rates (R²=0.057). After adjustment for case-mix there was still evidence of lower mortality rates. At patient level analysis showed the estimated risk of death from stroke unit care to be about 75% of the risk of having no stroke unit care.

Conclusion

These data show remarkable concordance with data obtained by the Stroke Unit Trialists' Collaboration for reduction in mortality.

50

THE MESSAGES ON IMPROVING THE QUALITY OF STROKE CARE FROM THREE ROUNDS OF NATIONAL STROKE AUDIT

P. IRWIN, A. HOFFMAN, D. LOWE, M. PEARSON, A.G. RUDD

Clinical Effectiveness and Evaluation Unit, Royal College of Physicians, London

Introduction

The results of three rounds of National Stroke Audit in England, Wales and Northern Ireland are compared.

Methodology

Audit of the organization of stroke services and retrospective case-note audit of up to 40 consecutive cases admitted over a 3 month period was conducted in 1998, 1999 and 2001-02. Changes in the organizational, casemix and process results of the hospitals that had participated in all three rounds were analysed.

Results

60% of all eligible trusts from England, Wales and Northern Ireland took part in all three audits in 1998, 1999 and 2001-02. Total numbers of cases were 4996, 4841 and 5152 respectively. Casemix variables were similar in all three rounds. Mortality at 7 and 30 days fell by 3% and 5% respectively. The proportion of hospitals with a stroke unit rose from 48% to 77%. The proportion of patients spending most of their stay in a stroke unit rose from 17% in 1998 to 26% in 1999 and 29% in 2001-02. Improvements in standards of care between 1998 and 1999 (median gain of 9%) were not repeated in 2001-02 (median change zero%). In all three rounds standards of care were better in stroke units.

Conclusion

Low proportions of patients after stroke are managed on stroke units, where standards of care are higher. To ensure improvements in national standards more patients need to be managed in stroke units.

51

**UNDERGRADUATE GERIATRIC
MEDICINE EDUCATION - A SURVEY OF
PRACTICE AND OPINION**

*P. CROME¹, L. YOUNGMAN², A. MCGRATH³,
O.J. CORRADO³, S.C. ALLEN⁴*

*Keele University Medical School¹, Stoke-on-Trent,
University Hospital of North Staffordshire², Stoke-on-
Trent, Leeds General Infirmary³, Leeds and The Royal
Bournemouth Hospital⁴, Dorset*

Introduction

There is concern that gains achieved in embedding geriatric medicine within the undergraduate curriculum are in actual or potential danger of being lost. Relevant factors include: the change from a specialty-based to a thematic course, a greater amount of time being devoted to student-selected options and the perceived withdrawal of academic geriatricians from teaching.

Methodology

Separate questionnaires were sent to Heads of Medical Schools (Deans), Heads of Academic Units/Departments of Geriatric Medicine (Professors) and BGS Education and Training Committee members (Committee Members). For questions with categorical answers, the percentage for each response was calculated. For those with open-ended responses, each comment was noted.

Results

Response rates were: Deans 55% (17/31), Professors 65% (15/23) and Committee Members 78% (14/18). Geriatrics is taught in all schools, and to all students in all but two. Half the Professors stated they had a major involvement in undergraduate teaching; only one played no role. Geriatrics is most commonly taught with general medicine or psychiatry. Wide variations in where, when and by whom it is taught and how it is examined were reported.

Conclusion

The BGS should develop a key role in undergraduate education. This should focus on the dissemination of the new BGS undergraduate curriculum with the presentation and discussion of innovation and good practice. It will thus contribute to the training of young doctors who are both interested and knowledgeable about geriatric medicine.

52

**PATIENT EXPERIENCE OF
COMMUNITY HOSPITAL -
CHALLENGES TO
USER INVOLVEMENT**

*J. GREEN¹, J. SPINK², N. SMALL²,
J. YOUNG¹*

*Bradford Teaching Hospitals NHS Trust¹ and
University of Bradford²*

Introduction

There is an increasing concern to evaluate the effectiveness and efficiency of health service provision. This includes a commitment to seek and incorporate users' views. Users' views are characteristically equated with the expression of satisfaction with services received. It cannot be assumed that effectiveness and efficiency measures will harmonise with user satisfaction.

Methodology

We undertook qualitative interviews to explore the experience of a community hospital for patients as part of a randomised controlled trial of post-acute care rehabilitation for older patients. 13 patients (mean age 87; 9 females) were interviewed. The interviews were recorded, transcribed, coded and analysed using a framework approach.

Results

Three salient themes emerged: 1) Patients had unformed expectations: they had no clear sense of why they were in hospital. 2) The process of care rather than the impact of any technical intervention was of prime importance to patients. 3) Satisfaction was a product of the way patients perceived the physical environment and the sensitivity of staff.

Conclusion

The community hospital appeared to be delivering care in a way that elicited high satisfaction. That satisfaction was linked to the human rather than the technical competence of staff. If an aim of treatment is to involve patients fully in their care staff have to make more explicit the model of care they are implementing.

53

VERY FEW PATIENTS IN AN ACUTE GERIATRIC WARD SETTING ARE ABLE TO PARTICIPATE IN A SELF-MEDICATION PROGRAMME

S. EVANS, C. KEEP, L. MOXOM, S. CARTER AND A. WEBB

Elderly Care Department, Dorset County Hospital, Dorchester

Introduction

The benefits of self-medication have been widely documented but it is not routine practise on acute geriatric wards. We initiated a programme to gauge the feasibility of self-medication and to establish if this improved compliance after discharge.

Methodology

We recruited competent acute inpatients from two geriatric wards who would be expected to be independent with medications following discharge. Patients on the study ward received a detailed medication list and were assessed to determine the level of self-medication they could adopt. Patients on the control ward received usual care. Tablets were counted before, and 14 days after discharge.

Results

During the first month 4 patients were recruited from the control ward and 2 patients from the study ward; 115 patients were discharged from the control ward and 87 patients from the study ward. Only 2% of the study ward discharges and 3% of the control ward discharges were able to participate in the programme.

Conclusion

Self-medication could not be achieved in our population therefore the effect on compliance could not be established. Suitable patients were discharged promptly therefore not enrolled in the study. Pressures on staff time meant self-medication was not a priority during a nursing shift. Previous studies have relied upon research staff to implement such programmes. A number of patients lived in institutional care and were not usually responsible for their medications.

54

SUBDURAL HAEMATOMA IN A DISTRICT GENERAL HOSPITAL: ANALYSIS OF FEATURES PREDICTIVE OF OUTCOME

S. KHAN¹, V.M. BIJU¹, V. NANDA KUMAR¹, H. AL-MADFA², I.B. DAVIES¹

Department Of Medicine¹, Prince Charles Hospital, Merthyr Tydfil and Division Of Mathematics and Statistics², University Of Glamorgan

Introduction

Subdural haematoma (SDH) is common in the elderly (>65 years) and is associated with significant mortality and morbidity.

Methodology

We examined risk factors, clinical presentation, management and 6-month mortality in 67 elderly patients with SDH by retrospective case study from 1999-2002 in a district general hospital in South Wales. Clinical coding revealed 34 patients, while X-ray coding added another 33 patients. Data analyses employed goodness-of-fit Chi2 tests to determine features associated with mortality.

Results

67 patients had SDH; male=33, female=34. 75% had history of falls. 28% were on warfarin (n=13) or aspirin (n=6) therapy but was not related to mortality. Gender had a significant effect on mortality (p<0.05) where female patients had a worse outcome. Low density on CT scan suggesting chronic SDH had a significant effect on survival (p<0.05). Chronic alcoholism had a worse outcome in patients <80 years (p<0.05). Multi-variate analysis showed a significantly better outcome of surgery in patients <80 years (p<0.005) and a trend to twice-greater mortality following surgery in patients >80 years was observed (p=0.691).

Conclusion

This study provided evidence that gender, alcoholism and density on CT scan could be useful predictors of mortality. SDH is a treatable condition but surgical intervention in people >80 years with significant co morbidities need careful consideration. Future retrospective case studies must not rely on clinical coding alone to identify SDH patients.

55

DO NOT ATTEMPT RESUSCITATION (DNAR) DECISION MAKING AND TRAINEE GERIATRICIANS: NATIONAL SURVEY RESULT

P. MYINT, L. BOWKER

Norfolk and Norwich University Hospital

Introduction

DNAR decision making is an important issue in training and clinical practice for trainees in Geriatric Medicine. We investigated the experience and level of involvement in DNAR decisions among trainees.

Methodology

A questionnaire survey was sent to all BGS trainee members registered in the UK in November 2003. A reminder was sent out after 9 weeks to non-responders..

Results

There were 255 responses (62.5%). 5 were returned as wrong addresses. 250 responses were analysed. Consultants = 12, GP = 1, staff grade = 1, specialist registrars = 234, others = 2. 179 (72%) had working experience of ≥ 7 years in UK and 103 (41%) had held cardiac arrest bleep for ≥ 7 years. The majority (n = 203, 81%) had involvement with DNAR decisions 'sometimes' or 'commonly' in patients who were not under their care. 196 (78%) stated that they had made DNAR decisions in younger adults (18 - 55 years). 208 (84%) were aware of trust policy as guidance but only 131 (63%) thought it was helpful. A small number of respondents (n = 7, 2.8%) were unaware of presence or absence of such local guidance.

Conclusion

This questionnaire demonstrated that many trainees in Geriatric Medicine have continual involvement in DNAR decisions in a wide range of patients (including younger patients and those not directly under their care). Despite a high level of awareness of local guidance, one third of respondents did not find such policy helpful. Junior doctors remain in the front line for DNAR decisions and whilst most are now aware of local policy there is room to improve the availability and usefulness of such documents to help support this challenging role.

56

A MULTICENTER, RANDOMIZED, DOUBLE-BLIND STUDY OF DARIFENACIN VERSUS TOLTERODINE IN THE TREATMENT OF OVERACTIVE BLADDER (OAB)

J. FOOTE¹, M. ELHILAL², ON BEHALF OF THE DARIFENACIN SSTYPE STUDY GROUP

Midtown Urology and Surgical Center¹, Atlanta, Georgia, USA and McGill University², Montreal, Quebec, Canada

Introduction

To compare evaluate treatment with darifenacin, tolterodine and or placebo in OAB, focusing on females, the group most affected by urinary incontinence.

Methodology

Patients with OAB for ≥6 months (n=680, 21–93y, 83.5% female) received oral controlled release darifenacin (15mg or 30mg once daily), tolterodine (2mg bid) or placebo for 12 weeks. Efficacy, was recorded via electronic diaries.

Results

	Median (%) change from baseline at week 12			
	Darifenacin		Tolterodine	Placebo
	15mg n=112	30mg n=230	n=223	n=115
Overall Incontinence episodes/week	-11.4* (-83.3)	-12.6*** (-81.6)	-10.3** (-73.7)	-9.0 (-70.9)
Females Incontinence episodes /week	-11.6* (-78.9)	-12.6** (-80.7)	-10.5 (-74.2)	-9.0 (-64.9)
Micturition s/day	-1.9* (-19.8)	-2.0** (-20.6)	-2.2* (-19.3)	-1.3 (-13.2)
Urgency episodes/day	-2.7* (-37.6)	-2.8** (-32.6)	-2.4 (-27.0) (-27.0)	-1.7 (-25.4)
Volume/void (mL)	31.8** (23.4)	42.9*** (29.3)	25.5** (15.3)	5.8 (3.3)

*p<0.05,; ** p<0.01,; ***p<0.001 vs placebo.

The most common adverse events (AEs) with darifenacin 15mg, 30mg, tolterodine or placebo (dry mouth [34.8%; 65.7%; 26.9%; 9.6%] and constipation [25.0%; 44.3%; 12.6%; 6.1%], respectively), rarely led to discontinuation, despite treatment at 4x the proposed darifenacin starting dose. AEs were comparable in females. [to be confirmed, statistical comparison awaited]. There were few treatment-related cardiovascular (e.g. hypertension, palpitations,; 1.8%; 0.9%; 4%; 0%) or nervous system AEs (e.g. depression, dizziness,; 1.8%; 3.9%; 2.7%; 4.3%, respectively).

Conclusion

Darifenacin significantly improves OAB symptoms with no tolerability or safety concerns.

57

PROVISION OF INFORMATION TO CARE HOMES FOLLOWING HOSPITAL DISCHARGE

M.K. HARKNESS, E.H. IVESON

Leeds Teaching Hospitals NHS Trust

Introduction

Older people residing in care homes often have complex medical problems and limitation of activities of daily living. Good communication between hospitals and care homes is vital to provide the highest level of care.

Methodology

Postal questionnaire sent to 139 care home managers within the Leeds area.

Results

66 completed replies were received. Homes held approximately 1070 residential beds and 1145 nursing beds. Estimated 1339 new admissions and 445 re-admission to care homes over the previous year. Over 80% of homes felt that they did not receive sufficient information from hospital; most rating standards as poor. Written information was most helpful; this tended to be sent by nurses, although a telephone conversation was often rated as useful. Discharge letters were invariably illegible or difficult for staff to understand due to medical jargon. Details of current illness, medications (including changes) and activities of daily living were deemed most important. Lack of multi disciplinary information, plans for future follow up and limited details of transport arrangements were common..

Conclusion

Provision of information on hospital discharge of older people to care homes from this Trust is poor, which should improve as single assessment is introduced. A standardized discharge proforma with core multidisciplinary information would appear to be attractive to care home staff. Electronic transmission of patient information offers a huge opportunity for efficient dissemination to all relevant health care professionals.

58

CAN GERIATRICIANS ACCURATELY PREDICT DELAY IN DISCHARGE OF OLDER PEOPLE AT ADMISSION?

P. McBRIDE, D. HESELTINE, J. HARBISON

Dept of Geriatric Medicine, York Hospital

Introduction

The Community Care (Delayed Discharges etc) Act places a responsibility on geriatric services to discharge plan early following admission. The earliest point possible is the post-take round. It is unclear how accurately geriatricians can predict length of stay of patients at this stage.

Methodology

Over a 2-week period, consecutive patients ≥ 75 years were provided with an estimated discharge date on admission by one of 7 consultant geriatricians, who also predicted if admission may be prolonged (>2 weeks). Data were collected independently and not recorded in the patient notes. Patients were followed up to determine actual duration of admission.

Results

134 subjects were admitted over the 2 weeks. 4 subjects died and were excluded. Geriatricians correctly determined discharge date in 36% (95% ci 28-44%), improving to 52 % (ci 43-61%) when small tolerances were permitted. Predicted length of stay was overestimated in 19% (ci 12-26%) and underestimated in 45% (ci 36- 54%). Delayed discharges were predicted in 44 patients of whom 27 were (61%) were correct. However 24 other subjects, not identified by geriatricians, had lengths of stay >2 weeks and agreement between predicted and actual delayed discharges was only fair ($K=0.366$). Accuracy was not related to experience of the geriatrician.

Conclusion

Geriatricians can predict discharge at admission with only limited accuracy and, in general, such predictions are not likely to be of use in the discharge planning process.

59

**GERIATRIC INPUT IMPROVES
ACCESSIBILITY OF HOSPITAL BEDS
AND REHABILITATION SERVICES FOR
ORTHOPAEDIC PATIENTS**

K. TAI, Z. GIEROBA, L. GILES, P. HAKENDORF¹ AND
C. WHITEHEAD

Flinders University Department of Rehabilitation and Aged Care, Repatriation General Hospital, Daw Park, Australia and Clinical Epidemiology Unit¹, Flinders Medical Centre, Bedford Park, Australia

Introduction

Studies of effectiveness of geriatric input for orthopaedic patients have had conflicting results. Elderly patients with orthopaedic injuries other than hip fractures have also not been fully evaluated. We examined the effectiveness of direct geriatric input on the outcomes of orthopaedic patients.

Methodology

We compared the number of long-stay outliers (defined as patient with length of stay greater than upper Diagnosis Related Group coding trim point for specified condition) among orthopaedic patients 65 years and above admitted to a metropolitan hospital during 2001 (n=465) and 2002 (n=636; after introduction of orthogeriatrics service). More detailed analysis was performed on 397 casenotes comparing the first seven months of 2001 and 2002, and patients were classified into hip fracture and non-hip fracture groups. Information collected included length of stay, weight-bearing status, level of mobility, and discharge destination. Quality of care variables evaluated included urinary catheter use, delirium, respiratory failure, acute renal failure, psychotropic drug use and medication review.

Results

Geriatric input reduced the odds of being a long-stay outlier by 37.5% (p<0.02) on logistic regression analysis. In 2001, 12/ 91 (13.2%) non-hip fracture patients accessed rehabilitation services, compared to 29/ 113 (25.7%; p<0.05) in 2002. There were no significant differences in quality of care variables between hip fracture and non-hip fracture groups.

Conclusion

Direct geriatric input positively influences discharge planning and improves accessibility to rehabilitation services for elderly orthopaedic patients.

59A

**THE VALUE OF THE CLOCK DRAWING
TASK (CDT) IN PREDICTING
TREATMENT RESPONSE IN
SENIORS WITH DEPRESSION**

A.G. JUBY¹, J.D. PETRYK², D. STEIN³

*Division of Geriatrics¹, Department of Medicine²,
Division of Psychiatry³, University of Alberta,
Edmonton, Canada.*

Introduction

The clock drawing task (CDT) is known to be affected by visuospatial and praxis deficits, attention and executive dysfunction. Depression is also associated with some of these deficits, yet it has been shown that depressed individuals do not differ from their non-depressed peers in their ability to perform a CDT.

Methodology

A retrospective chart evaluation of consecutive Seniors with a DSM IV diagnosis of major depression, managed for at least six months in a Geriatric Psychiatry Clinic, was undertaken. Demographic, mental state (MMSE), CDT, geriatric depression scale (GDS) and treatment were recorded. The CDTs were evaluated blindly using five methods of CDT scoring: Manos, DeAth, Sunderland, Watson and Wolf-Klein.

Results

Of 58 participants, 39 (66%) were women. The average for: age was 77.5 years (66-90); MMSE score 26 (11-30); GDS score 7.5 (0-15); duration of depression 12 years (1-40). 34 participants (58%) improved, the remainder were unchanged or deteriorated. There were no statistically significant differences in pharmacotherapy profiles of the improved group compared to the remainder. The trend was for a normal CDT to reflect an improved participant, with sensitivity from 20-50% and specificity from 48-93% depending on the CDT scoring method used. The Sunderland and DeAth methods yielded a statistically significant difference between the CDT scores in the improved versus unimproved groups (p<0.025).

Conclusion

The CDT is a useful adjunct to treatment evaluation in depression. A normal CDT suggests a higher likelihood of treatment response. An abnormal CDT may be an indicator of underlying early dementia presenting with depressive features, which is usually less likely to respond to standard antidepressant treatment.

GLYCATED HAEMOGLOBIN AND COGNITION IN OLDER ADULTS

J.M. STARR¹, M.C. WHITEMAN², A. PATTIE²,
L.J. WHALLEY³ AND I.J. DEARY³

*Geriatric Medicine Unit¹, Edinburgh University,
Department of Psychology², Edinburgh University and
Department of Mental Health³, Aberdeen University*

Introduction

Diabetes mellitus is associated with cognitive impairment. However, diabetes is diagnosed at an arbitrary biochemical cut-off. We hypothesised that glycated haemoglobin (HbA1c) would be inversely correlated with mental ability in older adults without diabetes.

Methodology

We recruited a sample of adults all born in 1921 who would have been eligible to participate in the 1932 Scottish Mental Survey that measured childhood IQ at age 11. We re-administered the same IQ test at age 80 and collected blood for biochemical and haematological analysis including HbA1c estimation.

Results

Five hundred and seven participants seen had no history of diabetes or dementia and had Mini-Mental State Examination scores greater than 23/30. 498 had the IQ test age 80, 456 had age 11 IQ scores available. Mean HbA1c was 5.6% (s.d. 0.6%) of the 444 participants who had blood taken for estimation. HbA1c correlated negatively with age 80 IQ ($r = -.13$, $p = .005$), but not significantly with age 11 IQ ($r = -.085$, $p = .090$). In a multi-linear regression model adjusting for age 11 IQ and other known correlates of age 80 IQ, HbA1c remained a significant predictor ($b = -.08$, $p = .037$, r^2 -change = .006).

Conclusion

Elevated glycated haemoglobin contributes about 0.6% to lifetime cognitive decline in a non-diabetic population. This small effect size is unlikely to be clinically significant for individuals, but may have an important public health impact on cognition in old age.

DIETARY PATTERNS IN A FREE-LIVING POPULATION OF OLDER MEN AND WOMEN

S.M. ROBINSON, S.F. BATELAAN, H.E. SYDDALL,
H.J. GILBODY, E.M. DENNISON, C. COOPER,
A. AIHIE SAYER

*MRC Epidemiology Resource Centre, University of
Southampton, Southampton*

Introduction

There is increasing interest in the use of dietary patterns as a tool for understanding the importance of diet in the aetiology of disease.

Methodology

The diets of 1475 men and women aged 59-70 years were assessed using an administered version of the EPIC food-frequency questionnaire. Dietary patterns were defined using Principal Components Analysis.

Results

The most important dietary pattern (component 1) for both men and women was characterised by high intakes of fruit & vegetables, brown bread, oily fish, rice & pasta, and by low intakes of white bread and chips, sugar and full-fat dairy products. This dietary pattern, which is consistent with health recommendations, was more common in non-manual groups ($p < 0.001$) and in non-smokers ($p < 0.0001$). The second pattern (component 2) was harder to interpret, but may represent a more traditional pattern of eating. It was characterised in men by high intakes of vegetables, red & processed meat and by low intakes of brown bread and low-fat spread, and in women by high intakes of vegetables and full-fat spread, and by low intakes of low-fat spread. This pattern was more common in men who smoked ($p = 0.003$). It was not related to social class.

Conclusion

There are clear patterns of foods in the diets of these older men and women. We now need to understand the significance of these patterns in relation to disease outcomes.

62

OILY FISH CONSUMPTION AND GRIP STRENGTH IN FREE-LIVING OLDER MEN AND WOMEN

S.M. ROBINSON, S.F. BATELAAN, H.J. GILBODY, H.E. SYDDALL, E.M. DENNISON, C. COOPER, A. AIHIE SAYER

MRC Epidemiology Resource Centre, University of Southampton, Southampton

Introduction

The role of diet in the prevention of sarcopenia in older free-living individuals is unknown. Vitamin D supplementation studies show a reduction in the risk of falling, which may result from direct effects on muscle strength. Little is known about the importance of dietary vitamin D in free-living individuals.

Methodology

An administered version of the EPIC food-frequency questionnaire was used to assess the diet of 1475 men and women aged 59-70 years. Since the principal contributor to vitamin D intake of older adults in the UK is oily fish, we examined the relationship between oily fish consumption and maximum grip strength, measured using a Jamar dynamometer.

Results

Grip strength was strongly related to gender, height and age (all $p < 0.001$), and to oily fish consumption ($p < 0.001$) after taking account of these factors.

Average maximum grip strength (kg), according to weekly oily fish consumption

	men		women	
		(n)		(n)
none	43.0	(111)	25.0	(71)
less than one portion	43.1	(305)	27.1	(246)
1-2 portions	45.3	(224)	27.3	(231)
up to 3 portions	45.8	(50)	27.9	(65)
more than 3 portions	47.0	(42)	28.5	(61)

Conclusion

There is a strong relationship between oily fish consumption and grip strength in these older men and women. This is consistent with the proposed beneficial effects of supplemental vitamin D on muscle strength, and suggests that benefit can be derived from a diet high in vitamin D.

63

BIRTH WEIGHT, INFANT GROWTH AND MORTALITY IN THE HERTFORDSHIRE COHORT STUDY

H.E. SYDDALL¹, A. AIHIE SAYER^{1,2}, S.J. SIMMONDS¹, E.M. DENNISON¹, C. COOPER¹

MRC Environmental Epidemiology Unit¹, University Geriatric Medicine², University of Southampton

Introduction

Birth weight is related to cardiovascular mortality in the Hertfordshire Cohort Study but its relationship with other important causes of death is unknown. We addressed this by analysing a range of mortality outcomes and estimating the net effect of increased birth weight on mortality.

Methodology

37,615 men and women born in Hertfordshire 1911-39 were traced by the National Health Service Central Register to the end of 31/12/1999. Cause of death was coded to the International Classification of Diseases and analysed in relation to early size and growth using Cox's proportional hazards model.

Results

5,698 men and 2,218 women had died. Among men, higher birth weight was associated with decreased mortality risk from circulatory disease (hazard ratio (HR) per standard deviation (SD) increase in birth weight 0.93 (95%CI 0.90, 0.96) and accidental falls but increased risk of mortality from cancer (HR per SD of birth weight 1.06 (95%CI 1.02, 1.11)). Among women, higher birth weight was associated with reduced risk of mortality from circulatory and musculoskeletal disease, pneumonia, injury and diabetes. Greater infant growth was associated with decreased risk of circulatory and respiratory mortality in men only. Overall, a 1SD increase in birth weight reduced all cause mortality risk by 75yrs by 0.86 percentage points in men and women.

Conclusion

Birth weight is related to a range of causes of death. The net effect of higher birth weight is beneficial.

64

**PREVALENCE OF UNDERNUTRITION
AND RISK FACTORS FOR REFEEDING
SYNDROME IN ELDERLY CARE
ASSESSMENT WARDS**

N.J. MOORE, E.J. LEE, M.D. WITHAM

Department of Nutrition and Dietetics, Royal Victoria Hospital and Section of Ageing and Health, Ninewells Hospital, Dundee

Introduction

Undernutrition is known to be common in hospitalised individuals. No data exists on the prevalence of risk factors for refeeding syndrome in older patients admitted to hospital, and it is not known whether currently used nutrition screening tools detect patients at risk for refeeding syndrome.

Methodology

Prospective survey of consecutive admissions to elderly care assessments wards between October 2003 and January 2004. Data were collected from casenotes on medical history, height, weight, Birmingham Heartlands Nutrition Risk Score (NRS) and dietetic referral. Risk factors for refeeding syndrome were defined as: alcohol abuse, active cancer, chemotherapy, hyperglycaemia (BM.>20), no food >5 days, severe illness, >6kg weight loss over last 3 months, BMI <19.

Results

121 patients were studied, 79 (65%) were female. Mean age was 81.9 years. NRS data was available on 120 patients, 46 (38%) scored at low risk, 35 (29%) scored at moderate risk and 39 (33%) scored at high risk of undernutrition. 37/121 patients had 1 risk factor for refeeding syndrome, 10 (8%) had 2 and 1 (1%) had 3 risk factors. Of the 48 patients (41%) with at least 1 risk factor for refeeding syndrome, only 25 (52%) were categorised as high risk on the NRS and 16/48 (33%) were not referred to a dietitian.

Conclusion

A large number of older, frail patients admitted to these wards have risk factors for refeeding syndrome. A significant proportion are not detected by the NRS and are not referred for dietetic advice.

65

**THE EFFECT OF BALANCE TRAINING
ON POSTURAL STABILITY
IN PARKINSON'S DISEASE:
A PILOT STUDY**

*J.C. WHITNEY¹, D.W. MASKILL², J.C.T. CLOSE¹,
B. AL-SAFFER¹, S.R. LORD³*

Department of Health Care of the Elderly¹, King's College Hospital, London, Department of Health and Social Sciences², Brunel University, London and Prince of Wales Medical Research Unit³, University of New South Wales, Sydney, Australia

Introduction

Falls and postural instability are a common problem in Parkinson's disease (PD). Strength and balance exercise has been successful in improving postural stability and reducing falls in older people. No published papers have described such an intervention specifically designed for people with PD.

Methodology

12 participants with PD (mean age 69, disease duration 8.6 years, Hoehn and Yahr score 3.4) were recruited from clinics at King's College Hospital and randomised into either a balance-training (n = 7) or a seated exercise programme (n = 5) (20 sessions /10 weeks). Clinical balance measurements, a disease rating scale (UPDRS) and the physiological profile assessment (Lord et al, 2003) were measured before and after interventions.

Results

Participants completed 100% balance-training sessions and 98% seated exercise sessions. There was a significant reduction (Mann-Whitney) in the number of steps taken to turn 180° (p = 0.02) and postural sway (eyes closed on foam) (p = 0.03) following the balance training compared to the seated exercise programme. Analysis of change in the balance-training group (Wilcoxon) alone also demonstrated significant reduction in sway (eyes open on foam) (p = 0.03). Changes in muscle strength and the disease rating scale were not statistically significant.

Conclusion

This study suggests that people with PD are able to improve specific areas of postural stability with a 10 week balance training programme. Studies powered to detect falls reduction are now required.

66

HOW SHOULD WE INVESTIGATE RECURRENT DROP ATTACKS?

H.J. WOODFORD, J. NEWTON, R.A. KENNY AND S.W. PARRY

Falls and Syncope Service, Institute for Ageing and Health, University of Newcastle, Newcastle upon Tyne

Introduction

Drop attacks are a symptom rather than diagnosis and have multiple causes. Despite extensive investigation many patients remain undiagnosed. To determine the attributable cause of drop attacks, compare clinical characteristics of patients with explained versus unexplained symptoms and identify investigations of most value in diagnosis via retrospective cohort study.

Methodology

Subjects: Consecutive patients with recurrent drop attacks presenting to falls service. Investigations: full clinical evaluation, ECG, active stand[AS], carotid sinus massage[CSM], head-up tilt[HUT], 24-hour ECG/BP, and brain imaging/EEG/other investigations as appropriate.

Results

Attributable diagnoses achieved in 126 (65.3%) of 193 patients: cardiovascular 54(43%); neurological 52(41%); psychogenic 5(4%); drug-related 6(5%); miscellaneous 9(7%). Clinical characteristics: see Table 1. Diagnostic yield: clinical evaluation 45[23%]; CSM 29[20%]; AS 19[10%]; HUT 13[13%]; CT head 10[17%]; ECG 2[1%], ambulatory monitoring 2[1%]; EEG 1[0.5%].

	Overall N=193	Explained N=126(65.3%)	Unexplained N=67(34.7)	P=
Age (range)	75.1(26-94)	77.2(26-94)	71.3(39-91)	0.0006
Female(%)	126(80.3)	93(73.8)	62(92.5)	<0.01
Duration of falls (months) (SD)	26.4(36.3)	20.5(24.8)	37.5(49.7)	0.0107
Total number falls (SD)	18.6(67.6)	17.7(70.7)	20.4(62.0)	ns
Falls in last 6 months (SD)	6.0(12.9)	6.1(13.1)	5.8(12.4)	ns
Soft tissue injury(%)	113(58.5)	62(49.2)	51(76.1)	<0.001
Fracture(%)	53(27.5)	32(25.4)	21(31.3)	ns
IHD(%)	50(25.9)	38(30.2)	12(17.9)	ns
CVD(%)	29(15.0)	20(15.6)	9(13.4)	ns
Diabetes(%)	20(10.4)	12(9.3)	8(11.9)	ns
Hyper-tension(%)	62(32.1)	38(29.7)	24(35.8)	ns
Mean number medications (SD)	2.4(1.9)	2.7(1.9)	1.8(1.9)	0.0038

Conclusion

Patients with unexplained drop attacks despite intensive evaluation tend to be younger females on more medications with a longer duration of symptoms. Basic clinical evaluation and cardiovascular testing provide the highest diagnostic yield and should form the bedrock of systematic evaluation of such individuals.

68

CASE-MIX ADJUSTED OUTCOME ASSESSEMENT OF HIP FRACTURE CARE: A REPORT ON 16980 CASES FROM 15 HOSPITALS

C.T. CURRIE¹, A. YELLOWLEES², J.D. HUTCHISON³

Geriatric Medicine¹, Edinburgh University, Quantics Consulting² and Orthopaedic Surgery³, Aberdeen University

Introduction

Hip fracture is a serious injury with variable outcomes. The Scottish Hip Fracture Audit (SHFA) documents casemix, process and outcomes of hip fracture care with 93% follow-up at 4 months. We used statistical analysis of the SHFA database to explore the possibility of comparing case-mix adjusted outcomes of care in different hospitals.

Methodology

16980 hip fracture patients admitted to 15 hospitals from 1 Jan 98 to 30 Jun 03 were documented in terms of age, sex, source of admission, ASA grade and pre-fracture mobility in the SHFA database. Logistic regression, survival analyses and classification tree methods were used to produce case-mix adjusted inter-hospital comparisons of mortality and return home by 30 days.

Results

Mortality at 4 months was 21%, with ASA grade, walking ability, living circumstances and age the most important case-mix factors. One hospital had significantly higher adjusted mortality than the average, with delay to surgery and DVT prophylaxis identified as areas of potential concern. 48% of the 9638 patients admitted from home were home by 30 days, with age, walking ability and ASA grade at admission as the most important case mix factors. Three hospitals had significantly lower adjusted return home rates than the average.

Conclusion

Statistical analysis of an audit database allows casemix-adjusted inter-hospital comparison of hip fracture care, and offers an additional resource in the improvement of clinical governance for this important injury.

69

FRACTURE RISK FACTORS AND FRACTURE-PROTECTIVE PRESCRIPTIONS IN NONAGENARIANS: THE CAMBRIDGE CITY OVER-75S COHORT STUDY (CC75C) FOLLOWED-UP AFTER 17 YEARS

J. FLEMING, C. BRAYNE

Department of Public Health and Primary Care, University of Cambridge

Introduction

Despite steeply increasing incidence of falls and fractures in extreme old age, medications that can reduce fracture risk are often not prescribed. We assessed prevalence of risk factors for fractures in over-90-year-olds within a population-based longitudinal study (CC75C).

Methodology

110 cohort survivors (90 women) were visited in their usual place of residence for interview, calcaneum quantitative ultrasound scan and functional performance measures. Nurse-administered questionnaire data included fall and fracture history, osteoporosis risk factors, medication, and self-reported mobility.

Results

55% reported falling at least once in the year before interview and 33% said they had fallen twice. Half reported at least one past fracture, of which 89% occurred when aged ≥ 50 years old, and 18% had had a hip fracture. Bone strength as measured by Broadband Ultrasound Attenuation (BUA) was low in almost all subjects, and significantly lower in women than men. We found high rates of many established risk factors for falls and fractures - poor mobility, poor eyesight, cognitive impairment, poly-pharmacy and particularly use of psychotropic medication. Only a quarter took any calcium or vitamin D: 10% bought cod liver oil, 18% were on prescribed preparations, just one with additional bisphosphonate.

Conclusion

Despite the high prevalence of many risk factors for falls and fractures amongst over-90-year-olds in our study, only a minority are taking calcium, vitamin D or any other medication licensed for prevention of osteoporotic fractures.

70

ASSISTANCE ONLY CALLS FOR FALLERS BY NORTH EAST AMBULANCE SERVICE (NEAS).

P. KYLE¹, P. LIVERSIDGE¹, G. ROBINSON¹, T. CARR¹, M. GRIFFITHS¹, P. REEVE², J.L. NEWTON²

North East Ambulance Service¹, Falls and Syncope Service², RVI, Newcastle

Introduction

Current data suggests 35% of those over 65 fall annually. Those fallers who present to medical services are considered the 'tip of the iceberg'. The true prevalence of community falls in older people who do not present to medical services is unclear. The BGS/AGS Falls guidelines recommend proactive identification of fallers.

Methodology

NEAS has operational boundaries from Northumberland to South Durham. Data was collated prospectively utilising existing NEAS data bank information to identify all assistance only calls to those over 65 who had fallen and did not subsequently require attendance at A&E.

Results

During nine months 1168 calls were attended by 999 ambulance crews to deal with uninjured patients that had fallen and who did not require A&E attendance (130 calls per month or 4 calls per day). The number of calls to one individual was 16. Average time spent on scene by emergency crew was 27mins. This equates to 527hrs or 21 working days spent attending fallers who did not require further input other than lifting.

Conclusion

Many older people who fall inappropriately utilise the 999 emergency ambulance service for assistance. Care alarms or 'lifting teams' may be more cost effective. Reducing the number of falls in the community will have major financial and operational benefits for NEAS. This cross-organisational initiative will now be used to identify fallers to local falls teams allowing early intervention to prevent recurrence.

71

EVALUATION OF A MODIFIED RISK ASSESSMENT TOOL (STRATIFY) TO PREDICT WHICH ELDERLY INPATIENTS IN A REHABILITATION WARD WILL FALL

J.WHITE, A.JOHANSEN

Department of Geriatric Medicine, University Hospital of Wales, Cardiff

Introduction

It was demonstrated that a STRATIFY (St Thomas's Risk Assessment Tool in Falling elderly inpatients) score of ≥ 2 can identify 93% of falls in an elderly acute medical ward. The purpose of this study was to evaluate how this assessment tool performs in a rehabilitation setting, and whether a simpler modified version of the tool would be as predictive.

Methodology

A STRATIFY and modified STRATIFY (using a single question in place of the two Barthel score elements) score was completed by key nurses for all 101 patients (mean age 82 years, female 66.3%) in a 4 warded rehabilitation hospital. Fall incidence was then monitored over the following 4 weeks.

Results

A STRATIFY score (range 0-5) was derived by scoring one point for each of five risk factors. At a cut off score of ≥ 2 the modified STRATIFY score appeared as effective as the original tool - higher sensitivity 69.6% (cf. 65.2%) albeit at slightly reduced specificity 56.6% (cf. 65.1%). 34.1% (23.6%-42.8%, 95% confidence intervals) of patients with a STRATIFY score of ≥ 2 fell compared with 30.8% (21.8%-37.7%, 95% confidence intervals) of patients with the modified STRATIFY tool.

Conclusion

Both tools were easy to use, but poor predictors of falls. The STRATIFY score only predicted 65.2% of fallers, reflecting a higher incidence of falls in this setting compared to the acute medical wards of the original study.

72

BENIGN PAROXYSMAL POSITIONAL VERTIGO - A CURABLE CAUSE OF DIZZINESS

J. LAWSON¹, I. JOHNSON², D.E. BAMIOU², J. NEWTON¹

Falls and Syncope Service¹, Royal Victoria Infirmary and Regional ENT Service², Freeman Hospital, Newcastle, UK

Introduction

BPPV is a cause of dizziness that increases in prevalence with age, and is curable. Here we compare patients with BPPV referred initially to a Falls and Syncope Service (FSS) to those referred to an ENT unit.

Methodology

We identified dizzy patients referred directly to FSS with a diagnosis of BPPV confirmed by Hallpikes (FSS group) and patients diagnosed with BPPV initially referred to the ENT department (ENT group). Medical notes, investigations and outcomes were reviewed for all patients.

Results

59 subjects with BPPV were identified. 31(53%) initially referred to the FSS (2.6 per month; 22 females (71%)). Prevalence of BPPV in subjects attending FSS - 6.2%. 28 were initially referred to ENT (47%)(24 (86%) female;4.7 per month). FSS patients were older (mean (SEM) age 69(2.4) years vs 55.4(2.5); $p=0.0003$), dizzy symptoms had been present longer before diagnosis (mean (SEM) months 19 vs 11; $p=0.0273$). FSS patients had more than one type of dizziness (16% vs 0; $p=0.001$), were more likely to have cerebro- or cardiovascular co-morbidity (13% vs 4%; $p=0.0152$) and were taking more medications (3.2 vs 1.7; $p=0.0271$). 83% are cured with intervention if initially referred to FSS compared to 86% if referred to ENT.

Conclusion

BPPV is a curable cause for dizziness in older people. Older people are frequently referred directly to Falls units with BPPV. A high index of suspicion will allow early identification and treatment.

73

DIFFERING MOBILITY PATTERNS AND FALLS AMONG HOSPITAL IN-PATIENTS

R. VIGNARAJA¹, M. VASSALLO², J.C. SHARMA³, R. BRIGGS⁴ AND S.C. ALLEN⁵

North Middlesex Hospital¹, London Royal Bournemouth Hospital², Bournemouth, Sherwood Forest Hospital³, Mansfield and Southampton General Hospital⁴, Southampton

Introduction

Gait and balance disturbance have been shown to predispose to falls. In this study by analysing gait patterns between fallers and nonfallers in hospital inpatients we have attempted to determine why some patients with unsafe gait fall and stratify their risks.

Methodology

In a prospective open observational study over a one year period 825 consecutive patients admitted to three rehabilitation wards were gait assessed using the 'get up and go test'. Other characteristics assessed on admission included previous history of falls, medications used, visual and hearing impairment, abnormal lower limbs and acute or chronic confusion. The outcomes measures recorded were number of fallers, total number of falls and patients sustaining injuries.

Results

Of the 825 patients studied 72.6% of patients were assessed as having an unsafe gait and 19.8% as safe with a normal gait and the rest unable to mobilise. When comparing fallers and nonfallers in patients with an unsafe gait, we identified a significantly higher proportion of presence of confusion (66.2% vs 34.1% p<0.0001) and previous history of falls (85.3% vs 73.8% p=0.008) in the fallers group.

Conclusion

The easily identifiable characteristics in clinical practice like the presence of confusion and a past history of falls identifies those patients with an unsafe gait who are most at risk of falls.

74

SCREENING AND ASSESSMENT OF POSTURAL STABILITY IN A FALLS CLINIC SETTING

J. WHITNEY, S.R LORD¹, J.C.T. CLOSE

King's College Hospital, London and Powmri¹, Sydney, Australia

Introduction

The Timed Up and Go (TUAG) has been recommended as a simple screening tool to identify those at risk of falling and therefore likely to benefit from formal assessment and intervention (AGS/BGS Guidelines, 2001). The Physiological Profile Assessment (PPA) is a validated tool for quantifying risk of falling based on a composite of physiological measures—contrast sensitivity, lower limb strength, proprioception, postural sway and reaction time (Lord et al, 2003).

Methodology

100 consecutive falls clinic referrals underwent both the TUAG and PPA in addition to a simple test of cognition to determine how well the TUAG was able to predict risk of falling when compared to the more detailed PPA in a Falls Clinic population.

Results

Multiple linear regression revealed that TUAG and cognitive status were independent and significant predictors of PPA scores. These variables accounted for 22% of the variance in PPA scores (multiple R=0.47, p<0.001). The standardised beta weights were 0.42 for TUAG and -0.20 for cognitive status. ROC analysis indicated that 15 seconds in the TUAG was the optimal time period for identifying those with a marked risk of falling.

Conclusion

The TUAG and simple test of cognition can be used to streamline referrals in a high risk population, allowing for more efficient use of available resource in an everyday service context. A subsequent PPA offers formal quantification of risk and provides direction for tailored intervention.

**PEPTIC ULCER DISEASE (PUD):
AN AGEING PROBLEM?**

K.D. BARDHAN, C. ROYSTON

Rotherham General Hospitals NHS Trust, Rotherham

Introduction

We examined the profile of PUD patients presenting to our centre (population 250 000) from 1977 to 2001, to assess changes in the nature of the disease.

Methodology

All patients with duodenal (DU) and gastric (GU) ulcer have been prospectively followed and detailed records kept.

Results

Profile		1977-81	1982-86	1987-91	1992-96	1997-2001
Newly diagnosed (n)	DU	1065	1261	1056	984	801
	GU	305	510	452	324	351
Presentation with haemorrhage (%)	DU	7.2	12.4	17.1	16.7	19
	GU	11.5	22.3	27.0	29.6	32.8
The effect of age						
Mean age:						
New pts	DU	47.1y	50.9y	54.3y	53.9y	58.0y
	GU	55.1y	60.3y	63.2y	64.8y	66.6y
General Population		35.4y	36.3y	37.1y	37.7y	38.6y (2001)
The elderly (% ≥ 65 years)						
General population	DU	12.4	20.9	31.1	30.8	38.8
	GU	22.3	40.8	51.3	54.9	62
Presentation with haemorrhage (%)		12.3	12.9	14.1	14.9	15.6 (2001)
DU	DU	12.1	24.0	30.8	25.4	30.2
	GU	13.2	34.6	34.1	32.6	38.5

PUD now affects an increasingly older population (mean age – 11y vs. 3y for the general population). The proportion age ≥65y has almost trebled 2. Haemorrhage is increasingly common, more so amongst the elderly. 3. More women are now affected (1977-81: DU 25%, GU 35%; 1997-01: DU 34%, GU 45%).

Conclusion

The rising age at presentation is consistent with the "birth-cohort effect" hypothesis: exposure to "environmental" risk factors has steadily decreased, so PUD takes longer to develop and presents later. Bleeding at presentation is related to rising age. NSAID or aspirin use may also contribute. The natural history of PUD is changing. Against a background of declining prevalence in the population, PUD today selectively affects the elderly.

**SERUM HEAT SHOCK PROTEIN 70 AND
THE 2437T ALLELE OF THE HEAT
SHOCK PROTEIN 70-HOM GENE IN
THE BELFAST STUDY**

O. A. ROSS, M. D. CURRAN, K. A. CRUM,
D. MIDDLETON, I. M.REA

Dept Geriatric Medicine and School of Biology and Biochemistry, Queens University Belfast and Addenbrokes Hospital, Cambridge

Introduction

Heat shock protein Hsp70 has been implicated in the ageing process and in diseases accompanying increasing.

Methodology

We have measured heat shock protein 70 and anti-heat shock protein 70 in serum in subjects from the Belfast Elderly Longitudinal Free-living Aging Study (BELFAST) together with the frequency of the functional polymorphism, T2437C transversion (MetThr), in the HSP 70-Hom gene using oligonucleotide probes. Hsp70 declined significantly with age ($p=0.03$). Anti-heat shock 70 antibody showed a modest increase with age ($p=0.02$).

Results

Compared with younger controls, the 2437T polymorphic nucleotide increased non significantly in the elderly, BELFAST subjects. The TT genotype increased significantly increased in the BELFAST group ($p=0.03$), while conversely the TC genotype was significantly decreased in the aged subjects ($p=0.01$).

Conclusion

The change from Met (non-polar and hydrophobic) residue to Thr (polar and neutral) residue has been suggested to disrupt the peptide-binding specificity of HSP 70-Hom and have an effect on its functional efficiency. These findings might suggest that carriage of the T allele may negatively influence longevity perhaps through generation of two different HSP 70-Hom protein species

77

NUTRITIONAL, FOLATE AND VITAMIN B12 STATUS AND ITS RELATION TO DEPRESSION OR IMPAIRED COGNITION- A FOLLOW UP STUDY IN THE BELFAST ELDERLY LONGITUDINAL FREE-LIVING AGING STUDY (BELFAST)

C.L. MCVEIGH, S. SARUP, I.M. REA

Dept. Geriatric Medicine, Queens University Belfast

Introduction

Both depression and dementia can lead to nutritional deficiency. An association between depression and folate status has been found in clinical studies. This study examined the association between nutritional status, serum folate and vitamin B12 levels and the presence of depression or cognitive impairment in a follow-up study of octo/nonagenarians from the BELFAST study

Methodology

38 free-living, apparently well, cognitively intact subjects (mean age 82yrs), [BELFAST] were followed up at 5 years and assessed using the Geriatric Depression Tool (GDS), Folstein (30 point), Mini Nutritional Assessment tool (MNA) together with serum folate and vitamin B12 levels.

Results

Mean GDS was 3.4(SD2.5), serum folate 7.13(SD 5.3) and B12 553.4(SD 458) with significant differences between sexes for GDS(p=0.05), folate (0.02) and B12 (p=0.04). Mean MNA and Folstein were 25.8(SD2.7) and 27.6(2.5) respectively with no sex differences (p=0.78; p=0.36). 21-25% of subjects showed risk of mild depression or nutritional status and 6% showed mild cognitive decline. MNA was associated with GDS in male (r2=0.56, p=0.01) but not in female elderly subjects (r2=0.01), p=0.44). Intriguingly GDS score was positively associated with serum folate levels (r2=0.23, p=0.01).

Conclusion

Overall, there was the suggestion that nutritional status and depression might be linked in male subjects at 5 year follow-up in octo/nonagenarians from the BELFAST study. The intriguingly higher folate in subjects, categorised at risk of mild depression, might suggest vitamin supplementation.

78

REHABILITATION IN THE TENTH DECADE

K. MANKAD, S. MADAN, B.J.LIDDLE, H. ELPHICK

Department of Care of the Elderly, Northern General Hospital, Sheffield Teaching Hospitals NHS Trust, Sheffield

Introduction

Investigating factors leading to favourable outcomes in rehabilitation of the ninety plus population in a hospital setting.

Methodology

A study was conducted in four geriatric rehabilitation cohorts- 'Slow' stream (General Geriatric, Orthogeriatric, Stroke), and 'fast' track rehabilitation. All ninety plus patients admitted in 2003 were studied. The factors focussed upon were patient demographics, admission diagnoses, co-morbidities, social input prior to admission, polypharmacy, admission Abbreviated Mental Testing (AMT), Barthel's Index (BI) and duration of rehabilitation. Outcomes assessed were length of stay, discharge destination, mortality and readmission rate.

Results

262 patients above 90 years (mean 92.5, SD 2.43, F: M: :4.5:1) with a mean follow-up of 228 days post discharge were included in the study. Logistic regression analyses was used to determine the variables strongly affecting a particular outcome.

Outcome	Variables	p value	Odds Ratio	95% Confidence Interval
Mortality	Admission BI <average	<0.01	0.54	0.18-1.55
Length of Stay	Admission AMT <5	<0.01	1.08	0.58-2.03
	Admission <1 year before current	<0.01	1.17	0.68-2.01
Discharge destination	Discharge BI< average	<0.01	7.16	3.71-13.61
	Polypharmacy (<5)	<0.01	2.82	1.41-5.72
Readmissions	AMT <5	<0.01	2.50	1.23- 5.18
	Multiple Co-morbidities	<0.01	3.30	1.48-7.34

Conclusion

Functional and cognitive abilities remain the strongest predictors of successful rehabilitation in the 90+. Co-morbidities and polypharmacy also have a significant influence on outcome.

79

THE EFFECTS OF VITAMIN SUPPLEMENTATION ON PLASMA C-REACTIVE PROTEIN (CRP) AFTER ACUTE ISCHAEMIC STROKE (AIS)

R. ULLEGADDI, S.E. GARIBALLA

Sheffield Institute for Studies on Ageing, University of Sheffield

Introduction

Evidence shows that there is an increase in plasma CRP following AIS due to inflammation that is associated with oxidative damage. Elevated CRP is an independent predictor of poor long-term clinical outcome. We tested the effects of supplementary antioxidant vitamins, B-group vitamins or both during this critical period on CRP, markers of oxidative damage (malondialdehyde [MDA]) and total antioxidant capacity (TAOC).

Methodology

96 AIS patients within 12 hours of symptom onset were randomly assigned daily oral antioxidant vitamins (800mg vitamin E, 500mg vitamin C) [n=24], B-group vitamins (0.4mg vitamin B12, 50mg vitamin B6, 5mg vitamin B2 and 5mg folic acid) [n=24], both sets of vitamins [n=24] or no treatment [n=24] for 14 days. CRP, TAOC, MDA and vitamin status was measured at days 0, 7 and 14.

Results

Groups were matched for stroke subtype, age, disability and secondary complications. Supplementation significantly increased the relevant plasma vitamin markers. The table shows median changes in CRP, MDA and TAOC over 7 and 14 days. Plasma CRP and MDA increased and TAOC decreased in controls over two weeks. Treatment with antioxidant, B-group or both groups of vitamins significantly decreased CRP and MDA concentrations particularly during the first week. Antioxidant vitamins also improved plasma TAOC.

	Period (days)	Antioxidant	B-group	Both	Control
CRP (mg/L)	7*	0	0	0	7
	14	0	0	0	7
MDA (µmol/L)	7*	-0.13	-0.05	-0.08	0.03
	14	-0.09	0.04	-0.01	0.05
TAOC (mmol/L)	7*	0.09	0.00	0.05	0.01
	14	0.07	0.03	-0.01	-0.09

*P<0.05 for difference between groups

Conclusion

Supplementation with either antioxidant or B-group vitamins within 12 hours of onset of AIS may limit oxidative damage and inflammation.

80

ARE EARPLUGS EFFECTIVE IN IMPROVING SLEEP IN OLDER PATIENTS?

S. ALLSUP, R. DAVIES., S. ATKINSON, J. MARRIOTT, S. TILSTON AND D. KING

Department of Medicine for the Elderly, Wirral Hospitals NHS Trust

Introduction

Insomnia is more common in older people. In hospitalised patients, noise can exacerbate insomnia. Some studies have shown that earplugs can be effective in improving sleep, although none have been conducted in older patients. The aim of this study was to evaluate the effectiveness of earplugs in improving sleep in older patients admitted to an acute medical ward.

Methodology

Patients from one ward were given the choice of wearing earplugs for one night. Patients were not eligible if they were cognitively impaired (AMT<8), had a current ear infection or significantly impaired hearing. The following morning, patients were asked to comment about their previous night's sleep using a semi-structured questionnaire. This was then repeated with different patients on the same ward for a further three nights over a four-week period (one night per week).

Results

35/102 (34%) patients (median age 85 years, range 76 to 93 years) were eligible and offered earplugs of which 23 (66%) agreed to wear them for one night. Of these 23 patients, 14 (61%) felt that earplugs improved their sleep, although 9 (39%) commented that the earplugs kept falling out. Four patients (17%) took night sedation as well as wearing earplugs. If given a choice in hospital between sleeping tablets or earplugs, 15/23 (65%) patients stated that they would choose earplugs. 5/9 (56%) patients who had difficulty using earplugs stated that they would still prefer earplugs to help them sleep.

Conclusion

Earplugs are safer than hypnotics and should be offered as an alternative in patients who request night sedation, although randomised trials are required to directly compare the efficacy of earplugs with sedatives.

81

TESTING ACMEPLUS IN GRAMPIAN (TAG)

J.E. LYNCH, D.G. SEYMOUR, S.E. CAMPBELL,
W.R. PRIMROSE

*Medicine for the Elderly, University of Aberdeen and
Woodend Hospital, Aberdeen*

Introduction

ACMEplus measures case-mix and hospital outcome in acute medical patients aged 65+. We applied it in Grampian to test whether data collection was (1) feasible and (2) potentially useful.

Methodology

Non-medical personnel gathered data on 3 "sites": a medical admissions unit [MAU, n=106]; geriatric assessment wards [GerA, n=152]; community hospitals [ComH, n=73]. On Day 3, physical function, cognition, "geriatric giants"(GGs), main system affected, living alone, age, and gender were recorded. Hospital outcome was recorded up to Day 42.

Results

(1) No major problems in data collection.
(2) Physical disability rates were similar on all sites, cognition was worse in GerA. MAU patients were younger, had less GGs and were less likely to live alone. MAU, GerA, and ComH in-hospital death rates were 7.5%, 7.2% and 2.7% respectively ($p = 0.113$) with 75.5%, 65.1% and 78.1% being discharged home ($p = 0.07$). Mean durations of stay were 14.8, 22.4 and 15.7 days ($p < 0.0001$), readmission rates were 10.8%, 7.5% and 19.1% ($p=0.08$). Using "discharge home" as the outcome variable, a logistic regression model selected physical function, cognition, GGs, and living alone. The same 4 assessment variables "explained" 20.3% of the variation in length of stay, but here the addition of site improved the model (26.7% explanation).

Conclusion

It is feasible to use ACMEplus in routine care, and the resulting casemix-adjusted outcomes are potentially useful for clinical comparisons.

82

COMMUNITY GERIATRICIANS IN ENGLAND: A SURVEY OF LEAD CLINICIANS

N. ANDERSON, E. BURNS

*Department of Elderly Medicine, Leeds General
Infirmary, Leeds*

Introduction

There is a paucity of data about community geriatricians (CGs). We surveyed lead clinicians in England on this subject.

Methodology

A postal questionnaire was sent to all lead clinicians in England. We asked about current CG posts including when they were appointed, the number that were in preparation, stimulus for their development, and problems and benefits encountered.

Results

There was a 77% response rate. Only 23% of lead clinicians reported that colleagues within their trust had any community sessions; nationally 42 consultant geriatricians had community responsibilities and the majority (81%) of these spent 4 or fewer sessions on community work. 15 CG posts had been appointed within the last year and 27 posts were under development, 14 in direct response to the NSF for Older People. Reported benefits included providing coherence to community initiatives, better links between intermediate care teams (ICT's) and acute trusts, admission avoidance and facilitating discharge, and ensuring comprehensive geriatric assessment for residential and nursing home residents. Problems encountered included recruitment, under-resourcing of ICT's, and difficulties maintaining acute skills.

Conclusion

There is growth in the area of CG's, but the commitment of consultant resource to this area remains very small. Most of the new community geriatrician posts still have the majority of their sessions based in the acute trust. There are also difficulties in both recruiting and funding for these posts.

83

IS TUBE FEEDING ASSOCIATED
WITH ALTERED OXYGEN
SATURATION IN STROKE ?

84

WITHDRAWN

D. DUTTA, M. BANNERJEE, T. CHAMBERS

*Elderly Care, Gloucestershire Royal Hospital,
Gloucester*

Introduction

Dysphagic stroke patients are fed by naso-gastric (NG) and percutaneous endoscopic gastrostomy (PEG) tubes. Reduced arterial oxygen saturation (SaO₂) during swallowing, oral feeding and feeding tube placement has been demonstrated in stroke. It is not known if tube feeding causes similar episodes of hypoxia and whether pulse oximetry should be routine during tube feeding.

Methodology

We compared ischaemic or haemorrhagic stroke patients (calculated sample size 18 per group) who were NG or PEG fed with a control group of age matched non-dysphagic stroke patients fed orally. We excluded people already on supplemental oxygen. Pulse oximetry was performed before, during a meal or feed (for 20 minutes) and for 10 minutes after and changes from baseline determined. Comparisons were made using the paired and independent sample t tests.

Results

Twenty controls and 18 tube fed patients were studied. Mean age was 75 years and median time to assessment 14.5 days. The 2 groups were reasonably matched for age, sex, type of stroke and time to assessment but differed significantly in the Oxfordshire Community Stroke Project (OCSP) classification and Rankin score. The mean baseline SaO₂ of controls was 96.5% (SD;1.47) and that of the tube fed group 96.0% (SD;1.46). Reduction in SaO₂ from baseline during and after feeding ranged from 0.35% (NS) to 0.78% (p<0.05; not clinically significant) with no statistically significant differences between the 2 groups.

Conclusion

No clinically significant change in SaO₂ was found in our tube fed patients, suggesting that routine pulse oximetry during tube feeding is not necessary. More prolonged periods of monitoring may be necessary to completely exclude tube feeding related hypoxia.

85

FACTORS ASSOCIATED WITH FAECAL INCONTINENCE IN OLDER ADULTS IN HOSPITAL, COMMUNITY AND NURSING HOME SETTINGS

A. AKPAN¹, J. EVANS², D. OLLERHEAD², A. REESE¹, M. GOSNEY³, J.A. BARRETT¹

Wirral Hospital¹, Wirral Continence Service², University of Reading School of Food Biosciences³

Introduction

Faecal incontinence (FI) is the inappropriate or involuntary passage of faeces. Functional disability, faecal loading, cognitive impairment, loose stools, co-morbidity and anorectal incontinence have been suggested as factors associated with FI. This study was performed to determine whether the factors associated with FI differ between care settings.

Methodology

120 adults aged 65 years and over with faecal incontinence were assessed using a structured standardised interview and questionnaire to determine which of the factors associated with FI were present in each adult. 30 adults were recruited from each of the following care settings: acute wards; rehabilitation wards; living at home; and nursing homes.

Results

Faecal loading (FL) and functional disability (FD) were present more often in FI patients in the acute (FL 57%, FD 83%), rehabilitation (FL 63%, FD 83%) wards and nursing home (FL 70%, FD 66.7%) than in those living at home (FL 20%, FD 17%) (Chi-squared test P<0.01). Loose stools were more prevalent in the acute (66.7%) and rehabilitation (57%) wards (P<0.01). Cognitive impairment was more common (87%) in the nursing home (acute 43%, rehabilitation 47%, living at home 17%, P<0.01). There was no difference in co-morbidity related FI between the settings. There was insufficient data on anorectal incontinence.

Conclusion

There are differences between care settings in the factors associated with faecal incontinence. These should be borne in mind when assessing adults with FI in these settings.

86

FAECAL INCONTINENCE IN OLDER ADULTS: RESOLUTION, NON-RESOLUTION AND MORTALITY

A. AKPAN¹, J. EVANS², D. OLLERHEAD², A. REESE¹, M. GOSNEY³, J.A. BARRETT¹

Wirral Hospital¹, Wirral Continence Service², University of Reading School of Food Biosciences³

Introduction

Faecal incontinence (FI) in older adults has been reported to be reversible. Other studies have highlighted the association with a high mortality rate. In our study of the factors associated with FI we sought to identify the factors that are more likely to be associated with either resolution or mortality.

Methodology

120 older adults with FI were recruited from hospital wards, nursing homes and their own homes after appropriate consent or assent was given. Following an initial interview with a structured questionnaire, they were followed up at three months.

Results

The table below demonstrates the factors significantly associated with resolution / non-resolution of FI and mortality in the 3 months after the initial study assessment.

	Resolution	Non resolution	Deceased	P
Number	19 (15.8%)	79 (65.8%)	22 (18.3%)	< 0.01
Hospital wards	10 (52.6%)	31 (39.2%)	19 (86.4%)	< 0.01
Females	17 (89.5%)	37 (46.8%)	13 (59.1%)	< 0.01
Median Barthel ADL	13 (IQR 7-17)	6 (2-12)	1(0-5)	< 0.01
Urinary incontinence	10 (52.6%)	72 (91.1%)	20 (90.9%)	< 0.01
Cognitive impairment	1 (5.3%)	44 (55.7%)	13 (59.1%)	< 0.01

Non-significant factors included age, Wexner scores, faecal loading and co-morbidity.

Conclusion

Faecal incontinence was more likely to resolve in women without cognitive impairment, urinary incontinence or major disability. The faecally incontinent older adults who died were more likely to have profound disability and to have been in hospital.

87

**SPECIFICITY OF ALTERATIONS IN
AKT/PTEN SIGNALING IN ALZHEIMER'S
DISEASE TO BRAIN AREAS AFFECTED
BY DISEASE PATHOLOGY**

S. TIMMONS^{1, 2}, A. MOLONEY², R GRIFFIN²,
C. O'NEILL²

*Dept. of Geriatric Medicine¹, Cork University Hospital
and Department of Biochemistry², University College
Cork, Ireland*

Introduction

In Alzheimer's disease (AD), neurofibrillary tangles (NFT) and extracellular beta-amyloid accumulation are associated with temporal cortex neuronal death. There is increasing interest in Akt signalling, including PTEN negative regulation, in this process. This study investigates whether alterations in Akt / PTEN expression and subcellular distribution in AD are specific to the temporal cortex.

Methodology

PTEN, Akt and active, phosphorylated Akt (p-Akt) protein expression was compared in post-mortem temporal cortex (n = 16) and cerebellum tissue (n = 10) from AD cases and matched controls. Immunohistochemistry compared pAkt and PTEN subcellular distribution in AD and control cerebellum sections.

Results

In AD temporal cortex, p-Akt protein expression was increased by 150% (p < 0.02). The p-Akt /Akt ratio (i.e. Akt activation) was three-fold higher in AD, correlating with NFT (r = 0.7, p < 0.003). In contrast, there was no alteration in p-Akt expression or Akt activation in AD cerebellum. PTEN expression was selectively reduced in AD temporal cortex (p < 0.02), correlating with NFT (r = -0.6, p < 0.03). Immunohistochemistry demonstrated p-Akt and PTEN localisation to neuronal plasma membrane selectively in AD temporal cortex, not cerebellum.

Conclusion

Increased p-Akt expression and Akt activation (p-Akt / Akt ratio) in AD correlates with the NFT stage and is specific to the temporal cortex, the region most affected in AD, strongly implicating altered Akt / PTEN signal transduction in AD pathogenesis.

88

**LEVODOPA ASSOCIATED DYSKINESIA
IN PARKINSON'S DISEASE IS
RELATED TO BODY WEIGHT**

J. SHARMA, L. MACNAMARA, M. VASSALLO

Mansfield Community Hospital, Mansfield

Introduction

The factors known to lead to dyskinesia in Parkinson's disease (PD) are the disease duration and duration of levodopa therapy. We have studied the possible additional factors which might be implicated in the risk of developing dyskinesia.

Methodology

A cohort of PD patients was routinely assessed at initial presentation and periodically subsequently for the standard measurement scales in addition to the development of dyskinesia. A detailed account was made of the dopaminergic therapy.

Results

286 patients assessed at the first and 224 at the recent assessment. There was a significantly higher incidence of dyskinesia in females at the second assessment - 32% vs 20%, p0.05. The dyskinetic patients, had significantly higher maximum level dose of levodopa in addition to longer duration of PD and levodopa therapy. Additionally the dyskinetic patients had a significantly lower body weight, 67±15 kg vs 75±15 kg; p=0.001. The dyskinetic patients received higher dose per kilogram body weight irrespective of gender: 9.8 mg vs 6.8 mg per kilogram. Logistic regression and correlation coefficient analyses revealed weight and high levodopa dose to be the only significant factors for dyskinesia. More dyskinetic patients were treated with dopamine agonists.

Conclusion

Levodopa dose should be adjusted according to the patients' weight. Lighter weight patients, both male and female, should be managed with lower dose levodopa supplemented with dopamine agonists and other drugs.

THE FREQUENCY OF DEPRESSION
AND ANXIETY IN A PREVALENT
POPULATION OF
PARKINSON'S DISEASE

B. PORTER, R. MACFARLANE, N. UNWIN AND
R. WALKER

North Tyneside District General Hospital Rake Lane
North Shields Tyne and Wear NE29 8NH

Introduction

The frequency of depression in Parkinson's disease (PD) has varied from 4%-70%. The frequency of anxiety has varied from 20%- 29%. We detailed the frequency and clinical correlates of depression and anxiety in a representative PD population using the Hospital Anxiety and Depression scale (HAD).

Methodology

A case-finding methodology was used to identify a prevalent population of PD patients in an area of North Tyneside. Information regarding disease severity (Hoehn and Yahr, UPDRS) was collected from an in-depth interview. A score of 8 or >8 on individual HAD scales was used. Data were compared using non-parametric analysis.

Results

The HAD scale was completed in 122 cases (76%) out of 161. Cases with marked cognitive impairment were excluded. 28 cases (23% 95% CI 15-30%) were depressed. Depressed patients had higher Hoehn and Yahr scores ($p=0.006$), UPDRS scores ($p<0.001$). There was no difference between age at time of assessment ($p=0.078$), age at diagnosis ($p=0.10$), and disease duration ($p=0.34$). 34 cases (28% 95% CI 20-36%) were identified as having anxiety. There was no difference in Hoehn and Yahr stage ($p=0.032$), UPDRS score ($p=0.065$), age at assessment ($p=0.34$), age at diagnosis ($p=0.21$) and disease duration ($p=0.066$).

Conclusion

The frequency of depression was at the lower end of the previously reported range. Depression was associated with more marked motor disability. The frequency of anxiety was similar to that previously reported.

CURRENT ANTICONVULSANT
PRESCRIBING IN ELDERLY PATIENTS
WITH EPILEPSY: A SURVEY
OF GERIATRICIANS

J. COOPER, R. WATT, M FEELY'

Department of Elderly Medicine, Academic Medical
Unit¹, Leeds General Infirmary, Leeds

Introduction

Epilepsy in the elderly is an important but neglected disorder. The incidence and prevalence is higher than any other age group. Previous studies show variability in management yet there appears to be no guidance as to 'best practice' for antiepileptic drug (AED) use in the elderly. We explored current AED prescribing among geriatricians.

Methodology

A postal questionnaire was sent to 63 consultant geriatricians in the Yorkshire region, containing questions about their AED use in elderly patients with epilepsy.

Results

42 geriatricians participated. For partial seizures, 81% chose sodium valproate(VPA), 19% carbamazepine (CBZ) as first-line treatment, 21% starting after 1 seizure. For generalised seizures, VPA(83%), CBZ(10%), phenytoin(5%) were initial AED choices, 62% starting after 2 seizures. For poor control, most (79%) would titrate-up to the maximum (tolerated) dose. 26% would add-on a second drug. For all seizure-types, add-on drugs were predominantly lamotrigine(LTG) and CBZ. There was no use of 'new' AEDs (eg topiramate or levetiracetam). If AED substitution was undertaken, most used VPA or LTG (if on CBZ) and LTG or CBZ (if on VPA). 10% would refer to neurology, citing poor control, uncertain diagnosis as main reasons. Those finding specialist review difficult to arrange were all from district general hospitals.

Conclusion

There appears to be little consensus in AED management of epilepsy in elderly patients. Specialised epilepsy services for the elderly may improve this and promote research into this area.

PLANNED RESEARCH

91

CONTROL OF HYPERTENSION AND HYPOTENSION IMMEDIATELY POST STROKE (CHHIPS)

J.F. POTTER, T.G. ROBINSON, A.K. MISTRI FOR THE CHHIPS GROUP

Ageing and Stroke Medicine, Department of Cardiovascular Sciences, University of Leicester, Glenfield Hospital Leicester

Introduction

Abnormal BP levels are common following a stroke. Upto 60% of patients are hypertensive (>160mmHg) and nearly 20% are relatively hypotensive (SBP≤140mmHg) within the first few hours of ictus. Both these conditions are associated with adverse prognosis. Presently, the management of early post stroke BP changes is debatable.

Methodology

CHHIPS is a multi-centre, prospective, randomized, double-blind, placebo-controlled, titrated dose trial, which aims to recruit 2050 patients with clinically suspected stroke, confirmed by brain imaging, with no compelling indication/contraindication for BP manipulation. Hypertensive patients will be randomised to receive labetalol, lisinopril or placebo within 24 hours of symptom onset, and relatively hypotensive patients will be randomised to receive phenylephrine or placebo within 12 hours of symptom onset.

Results

The trial will assess the effects of acute pressor and depressor BP manipulation on early (<72 hours) neurological deterioration and 2-week death and dependency, and also the influence of stroke subtype and time to treatment on BP control and outcome measures.

Conclusion

The effects of acute BP manipulation on cerebral blood flow and the penumbra are unclear, as is the appropriate treatment regime. CHHIPS is a pragmatic trial designed to establish the risks and benefits of early BP manipulation post-stroke. It will also inform the design of future trials in this area. Centres interested in participating, please email chhips@le.ac.uk.

PSYCHOLOGY

92

DO PEOPLE WITH UNDIAGNOSED DEMENTIA IN THE COMMUNITY WANT TO BE FOUND?

M. FISH, A.J. BAYER, J.E.J. GALLACHER, Y. BEN-SHLOMO, CAERPHILLY COGNITIVE IMPAIRMENT STUDY GROUP

University of Wales College of Medicine and Bristol University

Introduction

The Caerphilly Prospective Study of men, now aged 67-84 years, has been conducted over 25 years. Dementia is an endpoint of current interest.

Methodology

All consenting subjects are screened by CAMCOG and those with scores ≤82 &/or MMSE≤23, &/or cognitive decline >10 points undergo comprehensive assessment to identify dementia. Information is collected from subjects and families about past and present care and their interest in future help with managing dementia.

Results

Of 180 screen-positives, 43 subjects had dementia and 23 of these were new diagnoses. Only 9/20 previously diagnosed subjects were under the care of a relevant specialist (geriatrician/neurologist/psychiatrist). The newly diagnosed were less cognitively impaired than those with existing diagnosis (mean MMSE 21.9 vs. 14.8; p<0.001). The majority had limited insight into their deficits. 4/23 had previously mentioned memory problems to their GP and 3 of these had been told deficits were due to age. 3/23 were under care of a relevant specialist for other conditions. Only 6/23 subjects (or their families) expressed interest in further medical input or follow up of memory problems when offered.

Conclusion

In this community cohort, about half of dementia diagnoses were newly made. Most of the subjects with an unsought diagnosis of dementia are not presently expressing interest in medical input. This may be consequent upon degree of impairment, level of family support, or interpretation of difficulties.

93

CHILDHOOD MENTAL ABILITY AND BLOOD PRESSURE IN OLDER ADULTS

J.M. STARR¹, H.C. FOX², L.J. WHALLEY³ AND I.J. DEARY³

Geriatric Medicine Unit1, Edinburgh University, Department of Mental Health2, Aberdeen University and Department of Psychology3, Edinburgh University

Introduction

Elevated blood pressure (BP) is associated with cognitive impairment in old age. We hypothesised an association between low pre-morbid IQ and higher BP could partly explain this.

Methodology

We identified participants of the 1947 Scottish Mental Survey, whose IQ age 11 was known, from the Grampian community health index and invited them for a health assessment at age 64 years and again at age 66 years. Blood pressure was measured on four occasions at each visit.

Results

506 participants were assessed at the first wave, 502 of whom had at least one blood pressure reading, and 298 participants were seen at Wave 2. Apart from being diagnosed with hypertension, the only other factor associated with significant blood pressure change was deprivation index (partial $h^2 = .019$, $p = .031$). Over both visits individual differences in SBP compared with DBP, were significantly associated with childhood IQ (partial $h^2 = .016$, $p = .045$, mean 2.2mmHg decrease in SBP, but only a mean 0.5mmHg decrease in DBP per standard deviation increase in childhood IQ). Deprivation (partial $h^2 = .016$, $p = .048$) was the only other variable with a significant effect.

Conclusion

Lower childhood IQ is significantly associated with higher SBP, but not DBP, in people aged about 65 years. Caution should be exercised by researchers and clinicians interpreting data relating blood pressure to cognition in the absence of pre-morbid measures of mental ability.

94

SLEEP DISORDERED BREATHING IN OLDER ADULTS UNDERGOING REHABILITATION IN AN INTERMEDIATE CARE FACILITY

A.P. WEBBER, J.L. MARTIN, K.R. JOSEPHSON, J.O. HARKER, C.A. ALESSI

Sepulveda GRECC, VA GLA Healthcare System; UCLA School of Medicine, Los Angeles, CA, USA

Introduction

Sleep disordered breathing (SDB) is associated with poor rehabilitation outcomes in acute settings. We studied the prevalence and correlates of SDB in patients (age ≥ 65) undergoing rehabilitation in an intermediate care facility.

Methodology

Seventy-six participants (age 82 (SD 7) years; 57% female) had one night of multi-channel SDB monitoring. A respiratory disturbance index (RDI; apnoeas+hypopnoeas per hour of recording) was calculated. Participants were grouped into those with (RDI ≥ 5) and without (RDI < 5) SDB. Rehabilitation outcome was assessed by change in motor component of the Functional Independence Measure (mFIM) between admission and discharge. Other measures included: Geriatric Depression Scale-15 (GDS-15), Mini Mental State Examination (MMSE), Cumulative Illness Rating Scale-Geriatrics (CIRS-G) and reason for admission.

Results

Mean RDI was 11.4 (SD 13.3); 43 (57%) had an RDI ≥ 5 . Participants admitted following medical problems (mean RDI 6.5), had lower RDI than participants admitted following stroke (mean RDI 16.8, $p = .03$) and trauma (mean RDI 16.9, $p = .007$). Participants with SDB had worse CIRS-G (co-morbidity) scores than those without SDB (24.8 vs. 21.8; $p = .008$). We found no association between mFIM change and RDI.

Conclusion

SDB was common and associated with greater medical comorbidity. Stroke and trauma patients had more SDB than patients admitted for other reasons. SDB was not associated with immediate functional outcome. Further research is needed to determine whether there are longer-term effects of SDB on rehabilitation outcomes.

95

**CURB CRITERIA IN COMMUNITY
ACQUIRED PNEUMONIA
IN THE ELDERLY**

P. MYINT¹, A. KAMATH¹, S. VOWLER², D MAISEY¹
AND B. HARRISON¹

*Norfolk and Norwich University Hospital¹ and Centre
for Applied Medical Statistics², University of
Cambridge*

Introduction

Community Acquired Pneumonia (CAP) in the elderly is common and associated with a high mortality. We assessed the usefulness of CURB criteria [severe pneumonia = { ≥ 2 of new onset confusion, urea > 7 mmol/L, respiratory rate (RR) ≥ 30 /min, and blood pressure (BP) = systolic < 90 mmHg or diastolic ≤ 60 mmHg}] in the elderly.

Methodology

We performed a prospective observational study in patients aged ≥ 65 years admitted with CAP to our hospital (catchment population = 568,000) from December 2002 to May 2003. CAP was defined by the presence of CXR shadow and clinical features of pneumonia.

Results

N = 100, male = 56, median age = 81.5 years (range = 65 -96), median hospital stay = 11 days. 21 patients died (median stay = 7 days). 17 of 55 with severe pneumonia died compared with 4 deaths in non-severe cases (sensitivity 81%[58%, 95%], specificity 52%[40%, 63%]). Although severe CAP defined by CURB [OR=4.59 (1.42, 14.85)], higher RR [OR =1.07 (1.01, 1.14)] and lower systolic BP [OR = 0.98 (0.96, 1.00)] were significantly associated with mortality; as individual criterion, confusion [OR = 2.74 (0.99, 7.57)], blood urea [OR = 7.24 (0.91, 57.36)] and RR [OR = 2.86 (1.00, 8.19)] showed only borderline significance and BP [OR = 2.07 (0.76,5.62)] did not show any significant association.

Conclusion

While still useful in identifying severe pneumonia in the elderly, the CURB criteria could be improved because confusion, raised urea and low diastolic BP are not uncommon in acutely unwell elderly patients. This suggests the need for further validation studies of CURB criteria in this age group.

96

**HOSPITAL AT HOME - DOES IT MEET
THE NEEDS OF THE PATIENT WITH
COPD? A PATIENT'S PERSPECTIVE**

A. JOHNSON¹, G.KARIMOVA², B. WATSON³,
A. HENDERSON¹, S.K. BANSAL¹

*Newcastle University Department of Geriatrics
Medicine¹, Sunderland Royal Hospital, Sunderland,
Department of Research and Development²,
Sunderland Royal Hospital Sunderland and School of
Nursing³, University of Northumberland, Newcastle*

Introduction

The current trend towards hospital at home services is driven both by economic concerns and by the belief that these services effectively meet patient's needs and wishes. Despite such drives hospital admissions for COPD remain high, and there is evidence that this is not related to disease severity. This study explored the process leading to hospital admission of older people with COPD.

Methodology

Semi-structured qualitative interviews were carried out with twelve patients, stratified by disease severity, and ranging from 71 to 87 years. Interviews were transcribed verbatim and thematic content analysis was conducted.

Results

The events leading to admission varied (including anxiety, overexertion, being upset, and chest infection), as did the person initiating the admission (including the participants themselves, family and paid carers, general practitioners, and a window cleaner). Participants' home-care provision and family support, which was often considerable, also varied and none of these factors were related to disease severity. A major theme in the data was how participants evaluated hospital care. All participants valued hospital as a source of security and safety. Broader benefits included companionship, social intercourse and functional aspects of care.

Conclusion

Security and safety are essential aspects of care for people with COPD. Currently this is not seen as a feature of community or hospital at home services. This is an important message for service providers and planners who seek to reduce hospital utilisation

97

CONSENT FOR THROMBOLYSIS FOR ACUTE ISCHAEMIC STROKE

I. KANE, R. LINDLEY, P. SANDERCOCK

Division of Clinical Neurosciences, Western General Hospital, Edinburgh

Introduction

Treatments for acute stroke are evaluated in randomised controlled trials. The regulations concerning informed consent for such patients, who are often suddenly rendered mentally incompetent by their stroke, are changing. Our aim was to describe the consent process for patients in a trial of emergency stroke treatment.

Methodology

The Third International Stroke Trial is a multi-centre, randomised, controlled trial of intravenous recombinant tissue plasminogen activator for patients with acute ischaemic stroke who can be treated within 6 hours of symptom onset. Written consent is obtained when possible, but verbal consent (e.g. if the dominant hand is affected), or "assent" by relatives or other proxy, or "waiver" of consent (if the patient is acutely mentally incapacitated and no proxy is available) has been approved in some centres. We report the method of consent for the first 212 patients.

Results

Consent was written for 37 patients, verbal for 17, assent for 141 and waiver for 2 (data awaited on 15). The proportion of patients with total anterior circulation strokes was much greater in the assent group than in the written consent group (68% vs 19%).

Conclusion

Severe stroke patients are the least likely to provide written informed consent. Legislation that restricts trial entry to only those able to provide informed consent will exclude many who potentially have the most to gain from emergency intervention.

98

CAN MAGNETIC RESONANCE SPECTROSCOPIC IMAGING (MRSI) HELP PREDICT OUTCOME AFTER STROKE?

V. CVORO, K. WARTOLOWSKA, A.J. FARRALL, P.A. ARMITAGE, I. MARSHALL, M.E. BASTIN, M.S. DENNIS, J.M. WARDLAW

The University of Edinburgh Division of Clinical Neurosciences, Western General Hospital, Edinburgh

Introduction

Studies have shown that age and National Institute of Stroke Scale (NIHSS) are independent predictors of stroke outcome. Some lesion characteristics on diffusion imaging have been associated with poor outcome in smaller imaging studies. It is not clear if spectroscopy (MRSI) adds further to the prediction of outcome.

Methodology

Patients with acute cortical ischaemic stroke were imaged within 24 hours with diffusion weighted DWI (tensor), perfusion weighted (PWI) and MRSI. NIHSS was collected just before imaging and Modified Rankin score at three months. The MRSI slice was placed on the maximal visible lesion on DWI. DWI, PWI and MRSI slices were coregistered and processed blind to extract metabolites (MRSI), PWI and DWI (lesion volume and apparent diffusion coefficient-ADC) values from the ischaemic lesion.

Results

28 patients, median 75 yrs were imaged median 7.5 hours after stroke. NIHSS and age were good predictors of outcome ($p=0.001$, $p=0.01$). Addition of imaging parameters mean transit time (MTT), ADC and lactate improved the prediction model ($p=0.0001$) in multivariate regression analysis. Only ADC showed significant predictive value $p=0.032$ using univariate regression analysis. Diffusion lesion volume did not contribute significantly in multivariate or univariate model.

Conclusion

In early ischaemic stroke, more prolonged lesion MTT and reduced ADC in addition to age and NIHSS might help improve prediction of outcome. Lactate may be related to longer time to imaging in milder strokes.

99

WHAT IS THE PREVALENCE OF HIDDEN BUT POTENTIALLY TREATABLE CARDIAC ABNORMALITIES IN STROKE SURVIVORS? A PROSPECTIVE STUDY

K.Y.K. WONG¹, S. McSWIGGAN¹, N.S.J. KENNEDY², S.Y.S. WONG¹, A. GAVIN¹, R.S. MacWALTER³, A.D. STRUTHERS¹

Department of Clinical Pharmacology and Therapeutics¹, Department of Nuclear Medicine², Department of Medicine³, Ninewells Hospital and Medical School, Dundee

Introduction

Survivors of cerebrovascular disease are more likely to die of cardiac death than recurrent stroke, but few cardiac investigations are routinely done. Studies of single cardiac abnormalities e.g. coronary disease suggested that certain cardiac abnormalities might be more common in patients who had a stroke. However, no previous study has examined how often different cardiac abnormalities co-exist in individual stroke survivors. In this study, we evaluated the spectrum of hidden cardiac abnormalities in patients with cerebrovascular disease.

Methodology

Detailed cardiac investigations were performed in 202 patients who had cerebrovascular disease. Tests included ECG, echocardiography for left ventricular function and hypertrophy, myocardial perfusion scan, 24-hour ECG and autonomic function tests.

Results

Hidden but potentially treatable lethal cardiac abnormalities were common in survivors of cerebrovascular events. Silent myocardial ischaemia was prevalent (18%). Left ventricular hypertrophy was common (26%). Left ventricular dysfunction (echocardiographic ejection fraction <40%) was present in 8%. 70% of patients with left ventricular dysfunction were asymptomatic. 18% of patients had 2 or 3 of the abnormalities of left ventricular hypertrophy, left ventricular systolic dysfunction or abnormal myocardial perfusion scan. Some degree of autonomic dysfunction was present in 92%, whilst 20% had moderately depressed heart rate variability.

Conclusion

Hidden but potentially treatable lethal cardiac abnormalities are common and often co-exist. Future studies should address the cost-effectiveness for non-invasive cardiac investigations to screen and treat cardiac abnormalities in stroke survivors.

100

DOES CRANBERRY JUICE INGESTION PREVENT URINARY TRACT INFECTION IN OLDER HOSPITAL PATIENTS?

R.J.G. PRICE, L. BISSETT, G. PHILLIPS², I.K. CROMBIE¹, M.E.T. McMURDO

Ageing and Health, Department of Medicine and Therapeutics, Epidemiology and Public Health¹ and Microbiology², Ninewells Hospital and Medical School, University of Dundee

Introduction

Cranberry juice is commonly given to older people in hospital in the belief that it will prevent urinary tract infection (UTI). However there is little evidence to support this.

Methodology

Patients aged 60 years or over were recruited from acute Medicine for the Elderly assessment or rehabilitation units. Patients were randomised in a double blind study and prescribed either 300mls of cranberry juice or 300mls matching placebo beverage daily for a maximum of 35 days, or until hospital discharge.

Results

Of the 3,228 patients admitted to the study wards, 376 participants (mean age 81years) were randomised, and observed for a mean (sd) of 22 (11) days. Median (range) time to onset of first symptomatic UTI was 14 (1-27) days in the placebo group and 7 (3-20) in the cranberry group. This between group difference was not significant. A total of 21/376 participants (14 in placebo group and 7 in cranberry group) developed a UTI. Although there were significantly fewer infections with E coli in the cranberry group, this should be interpreted with caution as it was a secondary outcome (p 0.027).

Conclusion

While confirming the acceptability of cranberry juice to older people, the actual urinary infection rate observed was lower than anticipated. Despite being the largest trial yet to have studied the effect of cranberry juice, it was still underpowered, and larger trials are now required.

101

IMMUNOLocalISATION OF ENZYMES AFFECTING CAROTID PLAQUE MORPHOLOGY

A. KHATTAB¹, D. JENKINSON², I. ALP²

IHCS¹, Bournemouth University, Bournemouth and Royal Bournemouth Hospital², Bournemouth

Introduction

Although fibrous plaques are stable lesions, whereas lipid-laden plaques are prone to intimal tearing (initiating embolisation and stroke), it is still not possible to show any definite link between plaque type and cerebrovascular events.

Methodology

Ultrasound imaging of 15 carotid plaques revealed 9 echolucent (lipid-laden) and 6 echogenic (fibrous) plaques. Levels of matrix metalloproteinase-3 (MMP-3), nitric oxide synthases (NOS) enzymes and Chlamydia pneumoniae (CP) were determined using immunohistochemical and Western blotting techniques.

Results

MMP-3 levels were higher in echolucent than in echogenic plaques. High levels of MMP-3 and of its precursor (pro-MMP3) were observed near regions of ulceration, necrosis and where fibrous cap was thin or torn. NOS enzymes were present in all plaques irrespective of intraplaque features. However, levels of inducible NOS (NOS-II) were higher in echolucent than in echogenic plaques. Intense immunoreactivity for C pneumoniae was observed in two thirds of echolucent plaques, clustering near endothelial cells of intimal and neo-endothelial regions. No CP immunoreactivity was observed in echogenic plaques.

Conclusion

MMP3 or its pro-enzyme may play important role in digesting fibrous tissue of carotid plaques, leading to thinning/tearing of their fibrous cap. This might result in subsequent destabilisation of plaques, leading to embolisation and cerebrovascular events. MMP-3 and NOS identified in this study may have been influenced by CP which might be responsible for triggering cascades of inflammatory events leading to activation of these enzymes.

102

DETERMINANTS OF DELAY IN SEEKING MEDICAL ATTENTION AFTER A TIA OR MINOR STROKE

M.F. GILES, P.M. ROTHWELL

Stroke Prevention Research Unit, Radcliffe Infirmary, Oxford, UK

Introduction

The risk of stroke following TIA or minor stroke is greatest in the first few days; urgent assessment and treatment are therefore required. In contrast to hospital admissions after major stroke, few data exist on delays to seeking medical attention after TIA or minor stroke. We studied this delay and determining factors.

Methodology

Consecutive patients with TIA or minor stroke in three specialist clinics in Oxfordshire were studied. Patients were interviewed about their perception of the event, immediate actions, and the delay to seeking medical attention.

Results

Results were similar in the three clinics. Of 377 patients overall, only 41% patients with minor stroke and 37% with TIA correctly identified the diagnosis. 42% did not know the cause of their symptoms; many of the remainder related them to migraine, ocular problems or tiredness. Only 45% recognised the event as an emergency, and only 71% of patients with stroke and 59% with TIA sought attention within 24 hours. There was no difference in the speed of presentation between those who correctly recognised the cause of their symptoms and those who did not.

Conclusion

In our study population, correct identification of symptoms as TIA or minor stroke is poor, as is appreciation that these conditions represent a medical emergency. Public education is therefore required to decrease the delay in seeking medical attention following TIA or minor stroke.

103

CHALLENGES IN THE PROVISION OF ORAL CARE IN SPECIALIST STROKE SETTINGS ACROSS SCOTLAND

A. TALBOT, M. BRADY, D. FURLANETTO,
H. FRENKEL AND B. WILLIAMS

Care of the Elderly Department, Gartnavel General Hospital, Glasgow, Nursing, Midwifery and Allied Health Professions Research Unit, Glasgow Caledonian University, Glasgow and Dental Postgraduate Department, Bristol Dental Hospital, Bristol

Introduction

To document the oral care practices in stroke care settings in Scotland.

Methodology

We designed a postal survey to be completed by ward managers or senior nurses. After piloting, the survey was distributed to 71 units in Scotland identified as providing specialist care for patients in the acute or rehabilitation stages following stroke. Pre-notification and reminder letters were also circulated. Responses were anonymous. These approaches reflected strategies found to improve response rates to postal questionnaires (Edwards et al, The Cochrane Library 2003).

Results

All but one survey was completed and returned. Help from dental professionals was available on request to most units (64/70). Only a third of units received oral care training in the last year (23/70). The use of oral care assessment tools and protocols was limited (16/70 and 15/70 units respectively). Disappointingly, not all units had access to toothbrushes, toothpaste or chlorhexidine. For patients unable to perform oral care independently, senior nurses expected the patients' teeth or dentures to be cleaned at least twice a day in 59/70 and 49/70 units respectively.

Conclusion

The response rate was excellent and has provided a comprehensive overview of the challenges of providing oral care for patients in stroke care settings. Access to assessments, protocols and equipment varied considerably. This information represents a strong baseline from which to evaluate the effectiveness of oral care interventions for stroke patients.

104

AN ASSESSMENT OF THE UTILITY OF AN INDIVIDUALISED INFORMATION BOOKLET IN PATIENTS AFTER STROKE: THE CAREFILE PROJECT

D. LOWE¹, M.J. LEATHLEY², A.K. SHARMA¹

Stroke Team for Audit and Research¹, University Hospital Aintree, Liverpool and CPRU², University of Central Lancashire, Preston

Introduction

We have demonstrated that a personalised education booklet (CareFile) significantly improved patients' knowledge of stroke over a six month follow up period. Our aim now is to determine if patients use their CareFile after discharge and if patients would recommend the CareFile to other stroke patients.

Methodology

One hundred consecutive stroke patients who met the inclusion criteria, were randomised into the intervention or control group prior to discharge (baseline). In addition to the usual stroke information leaflets that all patients receive, the intervention group (n=50) received the 'CareFile', which contained general and patient-specific information on stroke. Patients completed a questionnaire at baseline, three and six months post-stroke, designed to assess the utility of the CareFile.

Results

A majority of patients brought their CareFile to both the three (78%) and six (86%) month Stroke Review Clinics. At six months 98% felt that the CareFile provided them with useful information, and over half (53%) reported they would refer to the CareFile for information regarding their stroke (compared with 18% and 27% who would approach the Stroke Association or their GP, respectively). Nearly all patients (98%) would recommend the CareFile to other stroke patients.

Conclusion

The CareFile had utility and was well liked by our patients. We believe the use of this booklet should assist in meeting the requirements of the National Service Framework with regard to improving patient information provision.

105

ARE PATIENTS WITH Milder STROKES LESS LIKELY TO PRESENT TO HOSPITAL FROM RURAL AREAS?

C. CROSER, A. LAWMAN, J. COYLE, J. HARBISON
Stroke Service, Dept of Geriatric Medicine, York Hospital

Introduction

York hospital serves the City of York (population ≈ 180,000) and a large surrounding catchment in Yorkshire (≈1000 km sq, population ≈ 120,000). Analysis of the hospital stroke register identified fewer lacunar syndrome (LACS) and posterior circulation (POCS) stroke than expected from previous studies. These are generally less severe strokes particularly when compared with Total Anterior Circulation syndrome strokes (TACS). We hypothesised that this finding may result from patients with milder strokes failing to present from rural areas.

Methodology

Data for patient domicile were reviewed for all subjects with TACS, LACS, and POCS for 21 consecutive months. A large scale map (1cm:1km) was used to identify if people lived within or outside City of York boundaries and whether resident in the city, suburbs, rural towns, villages or the countryside.

Results

Data for 364 subjects was obtained. Incidence of TACS was similar within and outside City of York boundaries (0.3/1000/year) but there was a higher relative proportion of mild strokes admitted from within the city (61% vs 50% $p < 0.05$ chi square). The proportion of mild strokes referred from urban /suburban areas was higher than that from rural towns (61% vs 56% $p < 0.01$) which was in turn higher than from the countryside (56% vs 38% $p < 0.05$)

Conclusion

Patients with milder strokes are less likely to present to hospital from rural areas suggesting a need to focus increased resources there.

106

PREDICTING THE EXTENT OF RECOVERY AFTER STROKE - HOW DO PATIENTS AND CARERS COMPARE WITH HEALTHCARE PROFESSIONALS?

J. KWAN¹, S. BEGUM¹, G. DURWARD²,
 P. CRAWFORD² AND H.C. ROBERTS¹

Elderly Care Research Unit¹ and Stroke Unit², Southampton General Hospital, Southampton

Introduction

Patient's and carer's expectations of recovery can influence the success of rehabilitation. Healthcare professionals' prediction of recovery is important for discharge planning. We studied their accuracy of predicting functional outcome after stroke.

Methodology

At one week post-stroke, patients on the stroke unit and their carer were interviewed, and their consultant, primary nurse and physiotherapist completed a questionnaire. Each was asked to predict the patient's functional ability at three months, using the Barthel Index (BI), Nottingham Extended Activities of Daily Living Questionnaire (NEADLQ), and Modified Rankin Score (MRS). The actual functional ability at three months was determined by telephone interview.

Results

Sixteen patients (9 females, mean age 78.8 years) and 11 carers were included. There was significant correlation for the BI between the predicted and observed scores for the patients, carers, and healthcare professionals. With the NEADLQ, significant correlation was found for the patients and carers but not healthcare professionals. With the MRS, no significant correlation was found for any party. Overall, the patients were the most optimistic about their recovery.

Conclusion

Stroke patients were accurate predictors of recovery at three months. This is important since patients play a central role in goal-setting during rehabilitation. Results varied widely between the three scales, which probably reflected the differences in their properties.

107

TOWARDS A MEASUREMENT OF SELF-EFFICACY FOR STROKE

F. JONES, C. PARTRIDGE, AND A. MANDY

St George's Hospital Medical School and Kingston University¹, University of Kent² and University of Brighton³

Introduction

Initial level of impairment post stroke may not fully predict how an individual develops confidence in their own performance. Psychological factors such as self-efficacy (SE) judgments may also help to determine progress and degree of activity limitation and participation restriction. The Stroke SE Questionnaire (SSEQ) was designed to assess the self-efficacy judgments of people following stroke, in domains of activity relevant to a stroke population.

Methodology

Derivation of items followed a review of scales measuring activity and participation in a stroke population, consultation with stroke professionals, and a qualitative study (< six months post stroke ; n=10). 40 first time stroke survivors were then administered the 22 item questionnaire, mean age of 68.4 (94-39 years). Average time 4.2 weeks post stroke.

Results

Analysis of the psychometric properties of the SSEQ suggested good internal consistency (Cronbach Alpha reliability coefficient .92). Principle Components Analysis revealed two underlying dimensions; functional level (55% of variance), and stroke management (19% of variance). The SSEQ took a maximum of 15 minutes to complete including subjects with mild and moderate dysphasia.

Conclusion

SSEQ now consists of 13 items which represent different levels of functional ability and self-management skills. Bandura's instructions (1997) for scale development stresses the need for sufficient complexity within tasks. The 13-item version has now been modified to reflect this .It is currently being tested for validity, intra-rater reliability and repeatability.

108

WITHDRAWN

109

DOES RESISTANCE TO PASSIVE MOVEMENT, MEASURED USING A SINGLE VELOCITY PROTOCOL, REPRESENT SPASTICITY IN A POST STROKE HEMIPLEGIA?

R. KUMAR¹, A. SHARMA¹, D PANDYAN²

Stroke Team for Audit and Research¹, University Hospital Aintree, Liverpool and Department of Physiotherapy Studies², Keele University, Staffordshire

Introduction

Spasticity, resulting from hyperexcitable stretch reflexes following a stroke, contributes significantly to disability. The modified Ashworth score (MAS), the most common measure of spasticity, uses a single velocity movement protocol to test the velocity dependent increase in resistance to passive movement (RPM).

Methodology

Cross-section pilot study in patients with post stroke elbow flexor spasticity. RPM was measured (assessor was blinded) using a slow stretch followed by a brisk stretch, during which the MAS score was simultaneously graded. The difference in the RPM between slow and fast (DRPM) was used to measure spasticity. The mean velocity of passive stretching (MV) was calculated.

Results

Forty-three patients participated. Mean (SD) MV of the slow stretch was 16deg/s (9) and that of the fast stretch was 43deg/s (23). Mean RPM during the slow stretch was 0.57N/deg (0.49) and the fast stretch was 0.97N/deg (0.92). These differences were significant ($p < 0.01$). The RPM for MAS score 5 was significantly higher than MAS scores 0, 1, 3 and 4 for both the slow and fast stretches ($p < 0.05$). There were no other significant differences in RPM and DRPM between the MAS groups ($p > 0.05$).

Conclusion

Spasticity, according to the existing neurophysiological definition, was measured using the protocol developed. Further work is now required to investigate whether the increase in RPM resulted exclusively from reflex hyperexcitability. Using the MAS as a measure of spasticity, a velocity dependent phenomenon is not valid.

110

HOW FREQUENT MUST TIA AND STROKE CLINICS BE TO SATISFY GUIDELINES ON URGENCY OF ASSESSMENT?

M.F. GILES, E. FLOSSMAN, P.M. ROTHWELL

Stroke Prevention Research Unit, Radcliffe Infirmary, Oxford

Introduction

The early risk of stroke after TIA or minor stroke has been shown to be higher than previously estimated. Rapid investigation and treatment are required. Based on current guidelines on urgency of assessment (AHA ≤ 7 days; RCP ≤ 14 days) patients are usually managed as outpatients. However, hospitals vary in the frequency with which clinics are run. It is uncertain how different services perform.

Methodology

We studied delays between initial event and clinic assessment in consecutive patients with TIA or minor stroke in three populations, each served by a dedicated hospital-based clinic of differing regularity: daily, weekly and fortnightly. Dates of the following were collected: initial event, call for medical attention, and clinic assessment.

Results

377 patients were studied (daily=127, weekly=168, fortnightly=82). Age distribution, clinical events and time to seeking medical attention were similar for each population. 14% of patients delayed seeking medical attention for ≥ 24 hours and 6% for ≥ 72 hours. The proportions of patients seen within 7 days of the presenting event were 79% in the daily clinic, 23% in the weekly clinic and 10% in the fortnightly clinic. The proportions seen within 14 days were 91%, 49% and 20% respectively.

Conclusion

Even a daily clinic service fails to assess a significant proportion of patients with TIA or minor stroke within the RCP guidelines. Weekly, or less frequent, clinics fail in the majority of cases.

111

**MODERNISING STROKE SERVICES:
THE NHS NATIONAL CLINICAL
GOVERNANCE SUPPORT
PROGRAMME FOR STROKE**

S. SQUIRE¹, D. JENKINSON

NHS Clinical Governance Support Team¹, Leeds and Royal Bournemouth and Christchurch Hospitals NHS Trust, Bournemouth

Introduction

The National Clinical Governance Support Programme for Stroke (NCGSPS) was created in 2001 by the NHS Modernisation Agency, the Royal College of Physicians (RCP) and The Stroke Association. To date there has been no quantitative description of the contribution of the Programme.

Methodology

The Clinical Effectiveness and Evaluation Unit (CEEU) of the RCP conducted a survey on changes in stroke services since the 2002 National Sentinel Audit. Proformas were sent to the lead clinician for stroke in the 240 sites that had participated in the last round of the audit. The CEEU reported on changes in stroke services at those sites that had completed the NCGSPS, compared with non-NCGSPS sites.

Results

One hundred and fifty delegates from 33 NHS organisations completed the NCGSPS, of which 30 sites (81%) responded to the CEEU survey. Of the non-NCGSPS sites, 189 of 203 (93%) sites responded. More NCGSPS sites gained stroke unit beds than non-NCGSPS sites (17%; 5/30, versus 7%; 13/189), more opened a new stroke unit (27%; 8/30, versus 11%; 20/189), more acquired a new stroke specialist nurse (25%; 7/28, versus 13%; 24/188) and more acquired new funding for stroke services (68%; 20/29, versus 37%; 67/181).

Conclusion

The trends from the survey by the CEEU support the value of the Programme and suggest that the principles of clinical governance are valuable in the development of services for people with stroke.

112

**THE EFFECT OF SHORT-TERM
NOCTURNAL OXYGEN TREATMENT
ON EARLY NEUROLOGICAL
SCORES AFTER STROKE**

C. ROFFE, S. SILLS AND M. HALIM

School of Medicine, Keele University, Staffordshire

Introduction

Nocturnal hypoxia is a common complication early after stroke, and may be a cause of neurological deterioration, even in patients who are normoxic during the day. This pilot study explores the effect of short-term nocturnal oxygen treatment on early neurological scores after acute stroke.

Methodology

Acute stroke patients within 72 hours of admission were randomised to receive 2l/min oxygen via nasal cannulae for the first night of the study or no routine oxygen (Control). Oxygen saturation (SpO₂) was assessed by pulse oximetry from 23:00 to 07:00 on night 1 (intervention) and night 2 (no intervention). Changes in patients' neurological signs were assessed using the Scandinavian Stroke Scale (SSS) at baseline, after night 1 (day 1) and after night 2 (day 2).

Results

The mean age of patients was 72.7 SD 8.6 years (22% total anterior circulation syndrome, 24% partial anterior circulation syndrome, 52% lacunar syndrome, 2% posterior circulation syndrome).

	SpO ₂ Baseline	SpO ₂ Night ¹	SSS Baseline	SSS Day 1	SSS Day 2
Oxygen Group [mean (SD)] % n=20	95.1 (2.0)	96.5 ¹ (1.7)	35.1 ² (11.5)	36.6 (12.4)	37.3 ² (12.5)
Control Group [mean (SD)] % n=24	95.4 (1.3)	94.4 ¹ (1.3)	29.6 ³ (18.6)	30.8 (19.0)	31.5 ³ (18.6)

¹p≤0.001 oxygen group vs. controls (Independent t-test)

²p=0.045 SSS baseline vs. SSS day 2 (Paired t-test)

³p=0.02 SSS baseline vs. SSS day 2 (Paired t-test)

Conclusion

Oxygen saturation was significantly higher during the intervention night in the oxygen treatment group than in the control group. Neurological status improved significantly from baseline to day 2 in both groups. There was no significant difference in the level of improvement between the intervention and control groups.

113

THE EFFECT OF OXYGEN TREATMENT ON COGNITIVE FUNCTION IN PATIENTS UNDERGOING REHABILITATION FROM ACUTE STROKE

114

WITHDRAWN

M. HALIM AND C. ROFFE

Keele University

Introduction

Cognitive impairment and tiredness are common problems after stroke. Stroke patients have been shown to have nocturnal hypoxia and sleep apnoea even late after the stroke during rehabilitation. Nocturnal hypoxia may be contributing to daytime cognitive problems. The aim of this study is to assess the effect of nocturnal oxygen supplementation on cognitive function in the stroke patients.

Methodology

Patients were recruited during rehabilitation >2 weeks of stroke onset and randomised to receive 3l/min oxygen (treatment group) or 0.5 l/min oxygen (control group) over night for two weeks by nasal tubes. Cognitive function was assessed before treatment (baseline) and at the end of treatment (week2) using the Mini Mental State Examination (MMSE), the National adult Reading Test (NART), the Trail Making A test (TMA) and the Trail making B Test (TMB).

Results

	Treatment group		Control group	
Age (years)	72sd8		71sd9	
Male sex	75%		70%	
Smokers	20%		17%	
Snorers	35%		57%	
Body Mass Index	25sd4		25sd4	
	Treatment group		Control group	
	Baseline	Week2	Baseline	Week2
MMSE	N=20	N=20	N=23	N=23
Median (range)	28(21-30)	29(23-30)*	28(18-30)	28(25-30) *
NART	N=20	N=20	N=22	N=22
Median (range)	11(4-41)	8(4-48) *	12(3-29)	12(3-32)
TMA (seconds)	N=20	N=20	N=20	N=20
Median (range)	83(29-340)	55(28-376) *	84(25-439)	90(20-331)
TMB (seconds)				
Median (range)	N=17		N=17	
	240(96-720)		224(71-684) *	
	N=19		N=19	
	283(70-1255)		291(48-655)	

*p <0.05 (Wilcoxon signed rank test)

There was significantly more improvement in cognitive function from baseline to week two in the treatment group than in the control group for the NART, TMA and TMB, but not for MMSE (p<0.05, Wilcoxon signed rank test).

Conclusion

Cognitive function improved more in patients receiving nocturnal oxygen than in patients in the control group.

115

THE THIRD INTERNATIONAL STROKE TRIAL (IST-3). THROMBOLYSIS FOR ACUTE ISCHAEMIC STROKE: CHARACTERISTICS OF PATIENTS RANDOMISED IN THE EXPANSION PHASE

I. KANE, P. SANDERCOCK, R. LINDLEY, S. LEWIS ON BEHALF OF THE IST-3 COLLABORATIVE GROUP

Division of Clinical Neurosciences, Western General Hospital, Edinburgh

Introduction

Recombinant tissue plasminogen activator (rt-PA) is now approved in the UK and Europe for the few, highly selected patients with acute ischaemic stroke who meet strict eligibility criteria, are aged under 80 and can be treated within 3 hours of symptom onset. IST-3 seeks to determine whether other categories of patients might benefit from treatment.

Methodology

IST-3 is a multi-centre, randomised, controlled trial of intravenous rt-PA (0.9mg/Kg, maximum dose 90mg), in patients with acute ischaemic stroke that meet eligibility criteria and can be enrolled and treated within 6 hours of onset of symptoms. The full protocol is available at www.ist3.com. Brain imaging is repeated at 24-48 hours and follow up is at 7 days and 6 months.

Results

By 19th April 2004, 220 patients had been recruited from 18 centres in 6 countries. The median time to randomisation was 3.9 hours. At baseline: 69% patients were aged over 70; 35% were in atrial fibrillation; 55% of those randomised had total anterior circulation, 32% partial anterior, 8% lacunar and 3% posterior stroke syndromes.

Discussion

The trial is recruiting categories of patients that might benefit from thrombolysis, but do not precisely meet the current criteria for treatment within the product licence. With the recruitment of such patients, reliable evidence will emerge on the effects of thrombolysis in a wider variety of patients than is covered by current approvals.

116

CLOTS - A RCT TO ESTABLISH THE EFFECTIVENESS OF GRADUATED COMPRESSION STOCKINGS IN STROKE PATIENTS

M. DENNIS FOR THE CLOTS TRIAL COLLABORATION

Dept of Clinical Neurosciences, University of Edinburgh, Western General Hospital

Introduction

There is considerable uncertainty over whether graduated compression stockings (GCS) are useful for the prevention of post stroke DVT. CLOTS aims to address the following two questions: Trial 1. Do full length GCS reduce the risk of above knee DVT following an acute stroke? Trial 2. Are full length GCS more effective than below knee GCS?

Methodology

Immobile patients admitted with an acute stroke can be randomised. The primary outcome is DVT in the popliteal vein or more proximal vein detected on either Doppler ultrasound or venography. Patients have a screening Doppler ultrasound of both legs between Day 7 and Day 10 and between Day 25 and Day 30. Data are collected at hospital discharge after enrollment to monitor compliance, in hospital complications and at 6 months to determine survival and functional status.

Results

Twenty six centres in 5 countries have already enrolled 528 patients of the planned 5000. By May 04, 250 patients had been enrolled in trial 1, of whom 21 (8.4%) had an above knee DVT. 278 had been enrolled in Trial 2 of whom 28 (10.1%) had DVT. There were no major differences between those with and without DVT with respect to age, stroke severity or time from stroke to randomisation.

Discussion

CLOTS will provide data to guide use of GCS after stroke. We are actively seeking collaborating centres.

117

USER INVOLVMENT IN THE DESIGN OF NEW MEDICAL IN-PATIENT ACCOMMODATION

R. ROY, E. COX, C. DIMOPOULOS, F. THOMSON
 Department of Medicine for the Elderly, Hull Royal Infirmary

Introduction

NHS guidance emphasises the importance of involving service users in service development. Traditional 'Nightingale' Medical Elderly wards in Hull are being replaced by new purpose-built accommodation. We sought the views of our elderly in-patient population to inform the design and working arrangements of the new facility. We report our progress to date.

Methodology

Patients were interviewed by a researcher using a questionnaire asking views on the current and future ward environment, patient-mix and privacy. Subjects who were unable to recall details of previous hospital admissions were excluded.

Results

Approximately 50% of in-patients were excluded because of mental and/or physical frailty. 51 patients [40 female, mean age 87(74-94) years] have been interviewed and 44(86%) lived in their own home. Most patients (39, 76%) preferred the open ward to a single room for reasons of companionship. Bays were the most popular (32, 63%) and Nightingale wards the least popular ward layout (7, 14%). Single sex accommodation (38, 78%) and 'an own-age-group ward' (31, 61%) were the favoured service models. Most were satisfied with privacy levels when undressing (94%) and using the commode (76%).

Discussion

Ill health and frailty prevents many of our patients from expressing views on service development. Preliminary results suggest that elderly patients accept their current ward environment but would prefer bays and to be with their own sex and age group. Data collection will continue to confirm these findings.

118

REHABILITATION OF DEPRESSED AND DEMENTED PATIENTS IN INTERMEDIATE CARE FACILITIES

A. WEBBER, C. ALESSI, J. HARKKER,
 K. JOSEPHSON AND J. MARTIN

UCLA School of Medicine and VA Greater Los Angeles GRECC, Sepulveda, CA, USA

Introduction

The National service Framework for Older People advocates the use of Intermediate Care Facilities (ICFs) to "promote rehabilitation and minimize premature or avoidable dependence on long term care in institutional settings". Demented and depressed patients are often excluded access to rehabilitation in ICFs both in the UK and US, because of concerns that they are less likely to benefit. In an ongoing prospective cohort study we are looking at effects of dementia and depression on participation in and efficacy of rehabilitation in ICFs.

Methodology

All patients aged 65 years or older, admitted for rehabilitation to one ICF, were eligible. Assessment included: Mini-mental State Examination (MMSE), Geriatric Depression Scale (GDS) and Functional Independence Measurement (FIM) at admission and discharge. Proportion of completed therapy was obtained from therapy documentation and discharge location was noted. Patients were grouped as 'demented' (MMSE<24) and 'depressed' (GDS>5).

Results

Of 115 patients enrolled to date, 64 have been discharged {mean age 81.7(SD 6.4) years}, 31 were demented, 18 depressed and 11 both. There were no differences between demented/not demented and depressed/not depressed groups in proportion of completed/prescribed therapy (108% Vs 105%, p=0.15 and 108% Vs 105%, p=0.21, respectively). There was significant improvement in FIM from admission to discharge for all groups {mean improvement 16.45, SD 16.08 (F(1,63)=150.5, p< 0.0001)}, with no significant differences between groups in discharge location.

Discussion

These preliminary findings suggest that depressed and demented patients can effectively participate in and benefit from rehabilitation in ICFs.

119

CONTINUE OR STOP POST-STROKE
ANTIHYPERTENSIVES
COLLABORATIVE STUDY (COSSACS)

THE COSSACS TRIAL GROUP

*Leicester Warwick Medical School, University
Hospitals of Leicester NHS Trust, Leicester*

Introduction

The management of hypertension immediately post-stroke remains a matter of some debate and the Continue Or Stop post-Stroke Antihypertensive Collaborative Study (COSSACS) will establish the efficacy and safety of blood pressure manipulation in the acute stroke period by the continuation or stopping of pre-existing therapy.

Methodology

COSSACS is a multi-centre, prospective, randomised, open, blinded-endpoint study, in which patients on pre-existing antihypertensive therapy, admitted to hospital within 24 hours of onset of suspected stroke, and within 36 hours of their last dose of antihypertensive medication, are randomised to continue or stop current antihypertensive therapy. The primary outcome for COSSACS is the proportion of patients who are dead or dependent (defined by a modified Rankin score >2) at 14 days post-stroke. Secondary outcomes include blood pressure changes, and neurological and functional status at 2 weeks and 6 months post-ictus.

Results

Currently 14 centres have recruited 88 patients to COSSACS. Ultimately 2900 patients, from over 30 United Kingdom Teaching and District General Hospitals, with suspected stroke will be randomised in the study. Logistic regression analysis will be used to assess the effect of continuation versus discontinuation of antihypertensive therapy on death and dependency corrected for baseline prognostic factors, including: age, sex, stroke type and subtype, and admission BP.

Conclusion

COSSACS will provide an important contribution to the debate regarding the treatment of acute post-stroke blood pressure.

120

A RETROSPECTIVE STUDY OF 72
OLDER PATIENTS WITH
OESOPHAGEAL CANDIDIASIS
DIAGNOSED IN A
DISTRICT GENERAL HOSPITAL

N. WEERASURIA, W. HOWARD AND J. SNAPE

*King's Mill Hospital, Sutton in Ashfields,
Nottinghamshire*

Introduction

Oesophageal candidiasis (OC) has been studied widely in younger populations, but not in older patients. 72 older patients with OC were studied (the first 20 reported here) to identify risks, clinical predictors, complications of endoscopy and treatment and the significance of OC as a marker of outcome.

Methodology

Retrospective analysis of 72 consecutive patients with histologically confirmed OC from 1995-2004. Indication, findings and complications of endoscopy, associated illnesses, Rankin's score, drug profile and outcome to point of analysis were studied using case notes and information from the General Practitioner.

Results

Mean age 80.0 years (range 65-93), 35% male. Anorexia (33%), anaemia (20%), dysphagia (20%) were main indications for endoscopy. Oropharyngeal candidiasis was not seen. 35% had malignancy, 20% COPD, 5% diabetes mellitus and 33% did not have at risk illnesses. 35% used Proton pump inhibitors (PPI), 20% antibiotics and 14% inhaled steroids. 65% have died, 50% within 1 year of endoscopy. 10% survived beyond 3 years. Overall Rankin score was < 2 in 60% at the time of endoscopy and not different in those who were alive at 3 years and those who died at < 1 year.

Discussion

OC appears a marker of poor outcome in older patients irrespective of disability. Classical clinical features are found only in a minority. OC is associated with malignancy more than diabetes or COPD and with PPI usage more than antibiotics or steroids.

Friday, 8 October 2004

Platform Presentations

Session J, 09:00-10:15
FALLS, FRACTURES & TRAUMA

121

FALLS AND HEALTH STATUS IN ELDERLY WOMEN FOLLOWING FIRST EYE CATARACT SURGERY: A RANDOMISED CONTROLLED TRIAL

R. H HARWOOD, A. FOSS, F. OSBORN,
R. GREGSON, A. ZAMAN, T. MASUD

City Hospital and Queens Medical Centre Nottingham

Introduction

A third of elderly people fall each year. Poor vision is associated with increased risk of falls. We aimed to determine if first eye cataract surgery reduces the risk of falling, and to measure associated health gain.

Methodology

We randomised 306 women over 70, with cataract, to expedited surgery (approximately 4 weeks) or a control group (routine surgery, 12 months wait). Falls were ascertained by diary, with follow up every 3 months. We measured health status after six months.

Results

Visual function improved in the operated group (proportion with acuity worse than 6/12 decreased from 24% to 8%; corrected binocular acuity was 0.25 log MAR units better than the control group). Over 12 months follow-up, 76 (49%) participants in the operated group fell at least once, and 28 (18%) fell more than once. Hazard ratio for first falls was 0.95 (95% confidence interval 0.69-1.35, $p=0.77$), and for second falls was 0.60 (95% confidence interval 0.36-0.98, $p=0.04$). Activity, anxiety, depression, confidence, visual disability and handicap all improved in the operated compared with the control group. Four participants in the operated group had fractures (3%), compared with 12 (8%) in the control group ($p=0.04$).

Conclusion

First eye cataract surgery reduces the number of recurrent falls and associated fractures, and improves visual function and general health status.

122

SOCIAL DEPRIVATION AND OSTEOPOROTIC LOW TRAUMA FRACTURES

I. MORGAN, R. YAZDAN, O. SAHOTA, M. GRAINGE,
J. PIPER, J. ROBINSON, R. WENN, C. WHITE,
C. MORAN

University Hospital and City PCT, Nottingham

Introduction

The relationship between social deprivation and osteoporotic fractures remains unclear, particularly in the elderly. The aim of this study was to examine this relationship.

Methodology

Data on all patients (males aged ≥ 60 yrs, females aged ≤ 50 yrs) presenting to the trauma & orthopaedic department with a low trauma fracture were collected prospectively over a 12 month period (Jan-Dec2003). Population statistics were collected from the Nottingham Census data, together with social deprivation scores (as assessed by the Index of Multiple Deprivation [IMD]), linked to patients by individual postcodes.

Results

There were 1392 limb fractures and 655 hip fractures [mean age 70.7(11.6)]. 80.3% of hip fractures occurred in females [mean age 81.5(9.4)]. The mean IMS score for Nottingham was 25.2. A total of 65 wards (population 55,479) were classed as non-deprived (IMD score below 25.2) and the other 25 deprived (population 63,308). Fracture rates were higher for limb fractures (RR 1.3; 95%CI 1.1, 1.5 $p<0.01$) but not hip fractures (RR 1.2; 95%CI 0.9, 1.4 $p=0.09$) comparing between deprived and non-deprived wards. Further analysis in those aged ≥ 75 yrs were similar (limb fractures RR 1.20; 95% 1.1, 1.4 $p=0.039$, hip fractures RR 1.1 95%CI 0.9, 1.4 $p=0.10$).

Conclusion

The incidence of low trauma osteoporotic limb fractures is higher in the more socially deprived population and extends further to the elderly. It is well documented that in the presence of a low trauma limb fracture the risk of hip fracture is increased 2-4 fold, therefore these patients are clearly a high target for falls and osteoporosis interventions.

EFFECTS OF 50G CARBOHYDRATE DRINKS OF DIFFERING GLYCAEMIC EFFECTS AND NUTRIENT CONTENT ON BLOOD PRESSURE IN HEALTHY OLDER PEOPLE

R. VISVANATHAN^{1,2}, R. CHEN², M. GARCIA²,
M. HOROWITZ², I. CHAPMAN²

*Department of Geriatric and Rehabilitation Medicine¹,
Royal Adelaide Hospital, South Australia and
Department of Medicine², University of Adelaide,
South Australia*

Introduction

Post-prandial hypotension (PPH) is prevalent, associated with morbidity but yet the pathophysiology is poorly defined. The blood pressure (BP) lowering effects of 50 g carbohydrate drinks with varying glycaemic effects and nutrient content were determined.

Methodology

Two randomized studies involving ten healthy elderly subjects. BP and plasma glucose levels were determined following ingestion of equal volumes of water and 50g carbohydrate drinks with reported varying published glycaemic indices (low 'Apple&Cherry' juice, intermediate ['Fanta Orange'], high [glucose]) in study 1 and equal volumes of water and drinks containing 50g of glucose, fructose and sucrose in study 2. The glycaemic index acted as a surrogate marker for the expected glycaemic effect.

Results

Glucose and 'Fanta Orange' ingestion with very differing observed glycaemic effects caused a similar (SBP P=0.894, DBP=0.497, MAP=0.5379) and significant decrease in BP over time (P<0.05), whereas the decrease in BP was significantly greater (P<0.05) following 'Fanta Orange' (100% sucrose) than 'Apple&Cherry' (mainly fructose) juice ingestion, despite their almost identical observed glycaemic effects. In Study 2, glucose and sucrose caused a similar (P>0.05) and significant decline in BP over time (P<0.05) whilst fructose had no effect on BP.

Conclusion

The nutrient content and not the glycaemic effect determines the effect of a drink on subsequent BP. Dietary manipulation replacing sucrose (table sugar) with fructose may be effective in the management of PPH in older people.

published by the **British Geriatrics Society**



Marjory Warren House
31 St John's Square
London
EC1M 4DN

Tel: + 44 (0)20 7608 1369
Fax: + 44 (0)20 7608 1041
Email: Info@bgs.org.uk
Website: www.bgs.org.uk

layout and design by Annette Guerda-Fischer
printed by Manor Creative