

President
Professor PH Baylis

Secretary
Professor R Taylor

Proceedings of the Association of North of England Physicians

“Prevention and reversal of obstructive bronchiolitis post lung transplantation would be a clinical advance in itself, but the lessons learned also have direct implications for reversal of airflow obstruction in patients with COPD”

P Corris

“Treatment with L-thyroxine improves vascular risk profile in patients with sub-clinical hypothyroidism”

S Razvi

**Abstracts of meeting held at The University Hospital of North Tees
Saturday 11 March 2006**

PREVALENCE AND ASSOCIATIONS OF MUSCULOSKELETAL DISEASE IN A DIABETIC POPULATION

Lizzie Leitch, Carol Heycock, Jennifer Hamilton, Vadivelu Saravanan, Clive Kelly
Queen Elizabeth Hospital, Gateshead

Our aim was to confirm the increase in upper limb musculoskeletal disease in diabetics and to explore links with retinopathy, nephropathy and HbA1c.

50 patients were assessed by the GALS screening test for musculoskeletal disease and a focussed upper limb examination, including tests for cheirarthropathy, carpal tunnel syndrome and capsulitis. A Health Assessment Questionnaire (HAQ) was completed for each patient. 40 patients had type 2 diabetes with a mean duration of 10 years. Mean age was 60. The majority were male. Mean HbA1c was 8.7%. The prevalence of upper limb musculoskeletal disease was 88% (shoulder 45%, hands 43%, both 20%) compared to 53% in controls. There was a link between the presence of poor control and probability of upper limb involvement.

Conclusion: Musculoskeletal upper limb involvement is common in diabetics and linked to severity and control of disease.

THE IN-PATIENT MANAGEMENT OF HIGH-RISK ACUTE CORONARY SYNDROME (ACS) PATIENTS IN A DISTRICT HOSPITAL SETTING

A Turley, MA de Belder, RH Smith, A Shyam-Sundar
The University Hospital of North Tees and James Cook University Hospital.

Guidelines recommend that 'high-risk' ACS patients be transferred for angiography within 72 hours. 74 patients with NSTEMI in a district hospital were reviewed. Only 45% patients were transferred for further inpatient investigation, 11 from cardiologists and 22 from non-cardiologists. Overall, 82% received aspirin, 55% received LMWH and 69% clopidogrel. Once 12 hour troponin T result was available, LMWH and clopidogrel use increased to 61% and 73%. Patients transferred were younger 64.3 vs. 75.2 ($p < 0.001$), although had similar TIMI risk scores to those not transferred. No patient received a GPIIb/IIIa receptor antagonist. In the 41/74 patients not transferred 10% died as inpatients. Only 56% of patients were discharged on clopidogrel.

Conclusion: Anti-platelet and anti-coagulant therapies are suboptimal in high-risk ACS patients. Should therapy be started on admission rather than waiting for troponin results? There is uncertainty about the management of the elderly.

THE CHANGING PRESENTATION OF COELIAC DISEASE

Vishal Varma, Anjan Dhar

Bishop Auckland General Hospital

We reviewed patients with total ($n = 50$) or sub-total villous atrophy ($n=20$) diagnosed between 2001 and 2004. Mean age was 53 yrs. M: F ratio was 1: 3. 27 % patients had extra intestinal manifestations (excluding psychiatric), 27% neuropsychiatric and 46% classical presentation of coeliac disease (CD). The commonest extraintestinal features were dermatitis herpetiformis (22%), pruritus (15%) and osteoporosis (15%), and anxiety was the commonest neuropsychiatric feature (56%). Diarrhoea was seen in 19% and abdominal pain in 25%. 74% were endomysial antibody positive. 3 were diagnosed as having CD on the basis of genetic testing (HLA DQ2/DQ8)

Conclusion: There is a high prevalence of atypical presentations of CD. Malabsorptive presentations may be decreasing.

CORRELATION OF LV DYSSYNCHRONY ASSESSED BY TISSUE DOPPLER IMAGING, WITH CLINICAL AND ECHO' IMPROVEMENT AFTER CARDIAC RESYNCHRONISATION THERAPY.

Davidson RF, McComb JM, Kenny A, Lord S, Plummer C, MacGowan G.
The Freeman Hospital, Newcastle Upon Tyne

30% of heart failure patients selected for cardiac resynchronisation therapy (CRT) based on current guidelines ($EF < 35\%$, NYHA III/IV, $QRS > 120\text{msec}$) will fail to respond. QRS prolongation is a poor marker for dyssynchrony, and echocardiography may be better. 15 patients were assessed before and after CRT. Three dyssynchrony indices were assessed – atrioventricular, interventricular and intraventricular dyssynchrony. All 10 clinical responders had dyssynchrony before CRT and improvement in ≥ 1 dyssynchrony indices after. Nine also showed improvement in stroke volume (SV) and myocardial performance index (MPI). 5 were non-responders; 2 had no dyssynchrony before CRT, 3 had dyssynchrony before CRT that did not improve after CRT. SV and MPI remained the same or worsened in four.

Conclusion: Echocardiography improves patient selection for CRT.

IS SUBCLINICAL HYPOTHYROIDISM (SCH) A RISK FOR CARDIOVASCULAR DISEASE?

S Razvi, J Weaver

Queen Elizabeth Hospital Gateshead

100 people (82 females) with SCH - mean (SD) thyrotropin (TSH) of 6.6 (1.3) mIU/l and no other risk factors were randomised in a double blind, cross-over study to either 100 mcg of L-thyroxine or placebo for

three months each, and their cardiovascular risk factors assessed. Compared to placebo, L-thyroxine treatment reduced TSH to 1.49mIU/L and FT4 and FT3 levels increased significantly. There was significant reduction in waist hip ratio, total cholesterol and LDL cholesterol. Endothelial function [assessed by brachial artery flow mediated dilatation (FMD)] increased significantly on the L-thyroxine. Multivariate regression showed that the improvement in total cholesterol and FMD correlated with the increase in FT4 levels.

Conclusion: L-thyroxine improves vascular risk profile in patients with SCH.

APOLIPOPROTEIN E2 PROTECTS AGAINST PERSISTENT HEPATITIS C INFECTION

Price DA, Bassendine MF, Gouldin C*, Norris SN*, Toms GL, Schmid ML, Morris C, Craig W, Burt AD, Donaldson PT.

The Medical School, University of Newcastle upon Tyne &* St. James Infirmary, Dublin.

Only 20-40% of patients infected with Hepatitis C Virus (HCV) are able to clear the infection. Infectious virions circulate bound to lipoprotein. The low density lipoprotein receptor (LDLr) is a receptor for HCV. Apolipoprotein E (APO-E) is found in very low density lipoprotein, binds to LDLr, and has three isoforms [epsilon-2, epsilon 3 and epsilon 4] with different binding affinities for LDLr. We studied 424 HCV Ab positive individuals and 288 healthy controls using PCR amplification and RFLP to determine APOE genotypes. We found the APOE*E2 allele was associated with an increased likelihood of self-limiting infection (OR = 2.38, p = 0.004). There was absence of E2/E2 homozygotes in the HCV Ab positive group (χ^2 compared to healthy controls = 4.26, p<0.05). The APOE*E3 allele was associated with viral persistence (OR = 1.86, p<0.001.).

Conclusion: APOE gene polymorphisms may be a determinant of outcome in HCV infection. The E2 allele may protect against viral persistence via defective binding of HCV lipoviral particles to LDLr.

MRSA IN THE DIABETES FOOT CLINIC: INCIDENCE, TREATMENT, AND OUTCOMES.

William Kelly, Richard Bellamy, Richard Kelly, Emma Scott, Rebecca Buckworth.

James Cook University Hospital, Middlesbrough

MRSA infections are serious, potentially life-threatening, significantly contagious, and increasing. Details were collected for 29 patients who were MRSA positive and for 168 patients who were negative. 9 of the MRSA positive patients had amputations, 3 leg amputations and 6 toe amputations.

8 patients of the MRSA patients died, all MRSA negative by the time of death. 64 blood cultures were done and none was positive.

Conclusion: MRSA infection is associated with increased risk of amputation, morbidity and mortality in patients with diabetes. A prospective audit is planned.

SELECTION OF PATIENTS WITH UPPER GASTROINTESTINAL BLEEDING FOR EARLY DISCHARGE USING THE BLATCHFORD SCORE

Wells CW, Thompson EC, Patvardhan C, Rutter MD, Ashley D.

University Hospital of North Tees

Many patients with G-I bleeding are at 'low risk' and if identified could be safely discharged. We applied the Blatchford and pre-endoscopy Rockall scores to a retrospective cohort of 123 patients. In this population the Blatchford score was superior to the Rockall score in identifying patients who did not need clinical intervention and were suitable for safe discharge. Application of this score would have identified 20% of patients for early safe discharge and reduced the need for in patient endoscopy by 15%.

LIFE-THREATENING DIABETIC KETOACIDOSIS (DKA) PRECIPITATED BY INITIATION OF THE ATYPICAL ANTI-PSYCHOTIC OLANZAPINE.

AJ Turley, E Thompson, RN Harrison

University Hospital of North Tees

Evidence is growing that hyperglycaemia is more commonly associated with olanzapine than the other anti-psychotics and that in some olanzapine may precipitate life threatening DKA.

A 20-yr old, female, caucasian university student was admitted acutely unwell after starting olanzapine (10mg/day). A diary provided by the patient for the week prior to admission documents improvement in psychotic features with only minor, infrequent 'whispers' heard. It also elegantly documented symptoms of polyuria and polydipsia e.g. 'frequent bathroom trips', 'drank large amounts' and 'I was up every hour for bathroom and drinks, felt dizzy all day.' Prior to admission she had started Penicillin V for tonsillitis. Urine ketones were present and serum glucose was 76mmol/l, HCO₃ 13 mmol/l. She responded to treatment and was discharged on insulin. Olanzapine was continued.

Conclusion: Patients and carers should be warned of the symptoms that indicate hyperglycaemia when starting olanzapine.

LATE PHASE ALLERGIC SKIN PRICK RESPONSES AS A MANIFESTATION OF ATOPIC INFLAMMATION IN MILD ASTHMA- AN UNDER-RECOGNISED PHENOMENON.

Michael Bone, Elaine Lee*, Kevin Fernandez, Gill McCrudden, Carole Chambers* and Stephen Kilfeather*

The Allergy Clinic, Palmers Hospital, South Tyneside Healthcare Trust and *Aiertec Clinical Trials Unit Centre for Life, Newcastle upon Tyne

Late phase skin prick test responses (8 hours) to house dust mite (HDM), and cat were evaluated in 32 mild asthmatic patients (stage 1 BTS/SIGN guidelines), all with +ve immediate skin prick tests to common allergens. 75% exhibited late allergic responses (LAR). FEV1 values were lower but not significantly so in the LAR group (2.80L v 3.24L). Circulating eosinophil levels were similar in each group. Only 4 of the LAR group had eosinophil levels >20% above normal. However, a higher incidence of nocturnal

symptoms (night time bronchodilator use) was noted in the LAR group (16 of 21 subjects assessed).

Conclusion: These data supports the view that constitutive atopic inflammatory responses are augmented even in mild asthma and that early use of anti-inflammatory therapy should be encouraged.

Invited Lecture

CHRONIC ALLOGRAFT DYSFUNCTION FOLLOWING LUNG TRANSPLANTATION – LESSONS FOR AIRWAY REMODELLING IN COPD

Professor Paul Corris

Professor of Thoracic Medicine, Freeman Hospital, Newcastle upon Tyne

Obliterative bronchiolitis (OB) compromises long-term survival after lung transplantation. A range of insults may be responsible including infection, oxidant injury, and gastro-oesophageal reflux.

OB is also an important cause of airflow obstruction in patients with COPD. The rate of decline in FEV₁ post lung transplantation is more rapid than in COPD, but the histological features are similar, and studying the mechanisms of OB after lung transplantation could yield new targets for therapy in patients with COPD.

Both conditions are characterised by a CD-8 T-cell and neutrophilic inflammation followed by a fibro-proliferative response, leading to collagen and matrix deposition in and around the airway. Injury to bronchial epithelial cells appears to be the key stimulus initiating the response and we have investigated the underlying mechanisms using techniques of immunocytochemistry applied to sequential endobronchial biopsies and primary bronchial cell cultures of lung transplant recipients taken from bronchoscopic brushings.

We found IL-17 to be an important link between lymphocytic inflammation and neutrophilic influx via epithelial cell IL-8 release. Collagen is laid down from fibroblasts and bronchial epithelial cells can transform into functional fibroblasts by epithelial to mesenchymal transition, a further potential novel target for therapy since this process is driven by TGF- β .

We have also shown occult gram-negative bacterial colonisation of the airway occurs after transplantation.

The colonisation takes the form of a pro inflammatory biofilm immediately adjacent to bronchial epithelial cells capable of inducing injury but without symptoms of sepsis. Finally Azithromycin which has both anti-inflammatory and anti-microbial activity improves lung function in over 50% of post transplant patients with OB.

Prevention and reversal of OB post lung transplantation would be a clinical advance in itself, but the lessons learned also have direct implications for reversal of airflow obstruction in patients with COPD.

Association Business

Date of next meeting: Friday 7th July 2006 at 2.00 pm at North Tyneside Hospital. Abstracts from Consultants, SpRs, Junior Doctors or Medical Students are all welcome. Presentations should reflect the range of clinical medical practice, including original research, clinical series, clinical audit and case reports. Please submit by email (around 150 words) before 26th May to beverly.hailstone@ncl.ac.uk with the abstract in an attached Word file. Also e-mail the names of any new consultant colleagues, or your own name if you are not on the mailing list.

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“...the demographics of HIV in the UK has changed over the last decade. Clinicians should consider HIV in their differential diagnosis even in elderly patients and seek a history of potential HIV exposure.”

“...There is poor understanding of the co-morbidity of inflammatory joint disease and its contribution to premature mortality”

**Abstracts of meeting held at Wansbeck General Hospital
Friday 7 July 2006**

OFF LEGS ?CAUSE

N. Premchand, N. Archibald, M. Snow
Newcastle General Hospital

A 70 year old gentleman presented with worsening mobility, falls and drowsiness. He had a background history of normocytic anaemia which had been investigated over the past 4 years. Direct Coombs' test was positive, but his Hb had not improved with steroids. He had a low grade fever. Imaging showed multiple ischaemic changes in both cerebral hemispheres. A lumbar puncture revealed cryptococcal meningitis. This patient was severely immunocompromised and had an uncommon opportunistic infection as a result of previously undiagnosed infection with HIV.

Conclusion: Although often thought of as a disease of gay men and drug users, the demographics of HIV in the UK has changed over the last decade. Clinicians should consider HIV in their differential diagnosis even in elderly patients and seek a history of potential HIV exposure.

MINIMISING THE RISE IN PLASMA GLUCOSE AFTER MEALS: CAN THE "SECOND MEAL EFFECT" BE EXPLAINED BY ENHANCED GLYCOGEN STORAGE?

Jovanovic A, Gerrard J, Snaar J, Morris P, Taylor R.
Royal Victoria Infirmary, Newcastle

The rise in blood glucose is less after the second meal of the day. To determine the metabolic basis of this, 6 healthy subjects were studied after lunch on two days, once with and once without breakfast. Changes in quadriceps muscle glycogen were measured using magnetic resonance spectroscopy. Plasma glucose concentration after lunch was significantly lower if subjects consumed breakfast (5.5 ± 0.3 versus 7.1 ± 0.4 , $p < 0.002$) despite the similar meal composition. Pre-lunch non-esterified fatty acid (NEFA) concentrations were significantly suppressed in this group (0.09 ± 0.04 versus 0.58 ± 0.06 mmol per litre, $p < 0.003$). The increase in muscle glycogen after lunch was 43% higher in subjects who had consumed breakfast.

Conclusion: One hour pre-breakfast administration of non-glucose insulin secretagogues, or possibly suppression of plasma NEFA, could have a therapeutic role in type 2 diabetes.

HYPERVENTILATION SYNDROME AND PULMONARY REHABILITATION IN COPD

Stephen Foster, Mohammad Fayaz, Robert Rutherford, Stephen Bourke, Gbenga Afolabi, Liam Doherty
North Tyneside General Hospital

COPD sufferers may have disordered breathing patterns such as hyperventilation. Hyperventilation syndrome (HVS) can be identified by a score of ≥ 23 by the validated Nijmegen questionnaire. We investigated the effects of 6 weeks pulmonary rehabilitation (PR) on patients with COPD and HVS using data from 50 COPD patients. 27/50 patients had HVS. The HV group were significantly younger compared to the non-hyperventilators (NHV). However FEV1, BMI, and resting oxygen saturations were similar. Exercise capacity was no different between the two groups. Quality of life (CRDQ) was worse in the HV group. PR significantly improved exercise tolerance and CRDQ in both groups, however Nijmegen score only improved in the HV group. There was a significant correlation between initial Nijmegen score and improvement in the emotional domain of CRDQ, and a trend towards improvement in "mastery" and a trend in negative correlation with fatigue.

Conclusion: Patients with COPD and HVS benefit from PR. The Nijmegen score may help predict improvement in quality of life but not change in exercise tolerance.

OUTCOMES OF ENDOSCOPY BEFORE AND AFTER "NICE" GUIDELINES - EXPERIENCE FROM A UK DISTRICT GENERAL HOSPITAL

S. Kay-Worrall, S. Ansari, M. Bateson, M. Ahluwalia, A. Dhar
Bishop Auckland General Hospital

The 2004 NICE guidelines for management of dyspepsia aimed to reduce the numbers of normal endoscopies for uncomplicated dyspepsia. We compared the results of endoscopy for dyspepsia during a 3 months period before and after release of the NICE guidelines. In 2005, average referral-to-endoscopy time was 23 days with $>90\%$ of 2-week targets being met. Alarm symptoms were present in 51.4% of patients at referral. Upper GI cancer was detected in 1.08%. In 2003, mean endoscopy waiting time was 10 days more than in 2005. Alarm symptoms were present in 31.3%, but only 1.4% had cancer. A 3-fold higher detection rate of Barrett's oesophagus was found in 2005, the reasons for which are unclear. All patients with cancers had alarm symptoms at referral. 45.6% of endoscopies were normal in 2005 compared to 50.7% in 2003.

Conclusion: The NICE guidelines for dyspepsia have not resulted in an increase in upper gastrointestinal cancer detection and despite the increase in referral by alarm symptoms, there is no higher cancer detection. Better and more careful application of alarm symptoms may be needed to achieve the objectives of the NICE guidelines.

DEATH CERTIFICATION IN RHEUMATIC DISEASE - AN ANALYSIS

OF THE INFLUENCE OF DISEASE AND ITS TREATMENT

Ben Thompson, Asmita Dixit¹, Clive Kelly, Carol Heycock, Vadivelu Saravanan, Jennifer Hamilton. Queen Elizabeth Hospital, Gateshead, ¹General Practice Registrar, Northern Region.

We identified from our monitoring database all patients receiving disease-modifying agents for rheumatic diseases who died between February 2000 and July 2004. Case notes were analysed. Two consultant rheumatologists independently determined the influence of disease or therapy on cause of death. The results were compared to death certificates. There were 126 deaths. The rheumatological diagnosis was mentioned on the death certificate in 33 cases (26%). In 25 cases this was included in Part II. Death was judged to be directly due to therapy in 4 patients. This was not reflected in the death certificate, although 'immunosuppressive medication' was listed in part II in one instance. **Conclusions:** There is poor understanding of the comorbidity of inflammatory joint disease and its contribution to premature mortality. Adverse events from treatment are under reported. Improving the accuracy of death certificates is essential.

TRANSTHORACIC CONTRAST ECHOCARDIOGRAPHY IN THE DETECTION OF PATENT FORAMEN OVALE

AJ Turley, J Thambyrajah, P Finn, A Griffiths, MA de Belder, M J Stewart
The James Cook University Hospital, Middlesbrough.

Patent foramen ovale (PFO) is common and is implicated in cryptogenic embolic stroke, migraine with aura, decompression sickness and more rarely myocardial infarction. The development of transthoracic echocardiography (TTE) with harmonic imaging, contrast and provocation testing has potentially enhanced our ability to detect PFOs transthoracically.

20 patients with an unexplained embolic event were studied. We compared 4 routes of contrast delivery: upper extremity vein in a dependant position, upper extremity vein in an elevated position, right femoral vein, and lower extremity vein, all with provocation manoeuvres on the detection of PFO using TTE and transoesophageal echocardiography (TOE). Studies were interpreted in real time by an echocardiographer in an unblinded manner. Studies were digitally recorded and reviewed independently by a 2nd BSE accredited echocardiographer blinded to the sequence and site of injection. The prevalence of PFO detected by TTE combined with a provocation manoeuvre was 50% (10/20). The prevalence in divers was 100% (5/5) and 38% (5/13) in patients with a cryptogenic stroke/TIA. TOE only detected 5 PFOs. All PFOs detected by TOE were detected by TTE. Valsalva improved the detection

rate for all routes of contrast delivery except IV access at the ankle. The highest detection rate was with injection in the elevated arm or via the right femoral venous route (10/20). Agreement between reviewers was excellent ($P < 0.01$). In 9/10 (90%) cases, the clearest image was obtained using TTE following a provocation manoeuvre. Left ventricular opacification was best during femoral vein injection coupled with valsalva manoeuvre and TTE.

Conclusion: TTE with harmonic imaging and femoral vein injection should now be the gold standard for the detection of PFO. If the arm is used contrast load is maximised by using a large ante-cubital vein and arm elevation.

THE PREVALENCE OF BARRETT'S OESOPHAGUS (BE) IN PRIMARY CARE PATIENTS WITH SYMPTOMS OF DYSPEPSIA.

Khan A R, Riazuddin M, Mahmood Z
West Cumberland Hospital Whitehaven

We studied the prevalence of Barrett's oesophagus (BE) in a cohort of 1344 primary care patients referred with symptoms of dyspepsia. Mean age was 54 years. 46% were male. Prevalence of endoscopic BE was 3.8%. Prevalence of biopsy proven BE was 2.4%. 0.9% had upper gastrointestinal cancers.

Conclusion: Prevalence of biopsy proven BE was 2.4% in primary care patients referred with symptoms of dyspepsia. BE was commoner in males and in patients over the age of 50.

CLINICAL ATTACHMENTS; FOND FAREWELL OR NEW BEGINNING?

Sudhir Wawdhane, Vivek Saraf, Sharon Davidson, Peter Trewby
Darlington Memorial Hospital

We analysed 573 international medical graduates' (IMGs) CVs and responses to a questionnaire asking for their experience of clinical attachments (CAs). We also recorded the views of 100 Northern Region consultants. IMGs had spent a mean of 16.5 (median 11.1) months unemployed. 90% had done one or more CAs having sent off an average of 73 applications. Median number of CAs undertaken was 2, average time spent on CAs 3.8 months. 90% found their CA helpful and 57% would not take up a post without a CA first. Criticisms related to lack of responsibility, isolation and poor job prospects. 90% would apply for honorary posts if advertised. Most (73%) had received induction at the onset of their post but fewer (32%) had been assessed at the end. 50% of consultants took CAs of whom only 2 (4%) were thinking of stopping. Those who did not take CAs blamed work pressures (43%) and pressure from their Trust (23%).

Conclusions: There are deficiencies in pastoral care, the application process and assessment, but CAs are valued by IMGs and offered by ½ of consultants. New immigration rules will mean fewer IMGs will come to the UK but the CA scheme will be needed by those that do, as well as refugees and some EEA graduates. The tradition of CA should be adapted to accommodate and encourage those coming to the UK on educational exchanges and scholarships.

Invited Lecture THE SWEETER SIDE OF STROKE

Professor Chris Gray
Professor of of Clinical Geriatrics, Clinical Sub-Dean, Newcastle University,
Honorary Consultant Physician Sunderland Royal Hospital

There is still no simple and safe treatment of proven beneficial value for patients with acute stroke. Recent progress in acute stroke treatments has either been consistently disappointing (neuroprotective therapy) or fraught with controversy regarding risk/benefit (thrombolysis), and attention is once again being directed towards physiological variables that may influence stroke outcome.

Hyperglycaemia is a frequent finding following acute stroke and may reflect the metabolic stress of the acute event, so-called stress hyperglycaemia, and/or impaired glucose metabolism (DM or impaired glucose tolerance IGT) previously manifest or otherwise. Several large clinical studies have demonstrated a positive association between a raised blood glucose and poor outcome from stroke: greater mortality and reduced functional recovery. There are many potential mechanisms by which hyperglycaemia can exert a harmful effect upon cerebral tissue and it is probable that an important relationship exists between glucose and stroke outcome.

A link between hyperglycaemia and enhanced cerebral ischaemic injury has never been confirmed by any clinical trial. In addition, although it has been proposed that insulin should be given routinely to correct hyperglycaemia following stroke it has never been formally investigated in humans. In the DIGAMI study, correction of hyperglycaemia in patients with DM and acute myocardial infarction conferred a 29% mortality reduction.

The Glucose Insulin in Stroke Trial has demonstrated both the safety and practicability of glucose/potassium/insulin (GKI) infusions in the first 24 hours. In this study, treatment with a variable insulin dose GKI regimen was associated with a physiological lowering of plasma glucose with no adverse effect upon patient outcome. GIST further confirmed that the GKI regimen proposed for this study could be delivered as part of routine stroke care to the maximum number of patients.

GIST-UK is a multi-centre randomised controlled trial that seeks to determine the clinical benefit of glucose/potassium/insulin (GKI) infusions to maintain euglycaemia in acute stroke patients with post stroke hyperglycaemia. The trial has recruited in excess of 900 patients with the majority randomised from Trusts in the Northern Region. The GIST trial steering committee are grateful to all colleagues in the Association who have supported the trial and look forward to sharing the results in spring 2007.

ASSOCIATION BUSINESS

Date of next meeting: 10.00 am Saturday 11 November 2006 at Sunderland Royal Infirmary. Meeting is CME approved. Abstracts from Consultants, SpRs, Junior Doctors and Medical Students are all welcome. Presentations should reflect the range of clinical medical practice, including original research, clinical series, clinical audit and case reports. Please submit by email (around 150 words) before 22nd September to beverly.hailstone@ncl.ac.uk with the abstract in an attached Word file. Also e-mail the names of any new consultant colleagues, or your own name if you are not on the mailing list.

The Dewar Research Workers prize: The closing date for this year's prestigious Dewar Research Worker's prize which includes £500 cash award is 30/9/06. Entries should be in the form of a written account of the research work (less than 1,500 words). Further details available from Professor Roy Taylor, Royal Victoria Infirmary or beverly.hailstone@ncl.ac.uk

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“Glucocorticoid sensitivity may have a causal role in obesity”

Akheel Syed, Christopher Redfern, Jolanta Weaver

“Mutations in at least 6 genes cause maturity onset diabetes of the young (MODY). The identification of these causal mutations has had a dramatic effect upon patient management and treatment.”

Professor Mark Walker

**Abstracts of meeting held at Sunderland Roayl Hospital
Saturday 11 November 2006**

November 2006

ADHERENCE TO SURVIVING SEPSIS GUIDELINES IN A DISTRICT GENERAL HOSPITAL: AN OBSERVATIONAL COHORT STUDY

Dr. Liz Varghese, Robert Barker, Dr Catherine Bartley, Dr. Robert Allcock

We assessed whether initial management of patients with sepsis followed the Surviving Sepsis Campaign guidelines. Patients admitted with or who developed sepsis were identified over a 5 day period. We checked initial management against the guidelines (intravenous antibiotics to be given within 1 hour of diagnosis, blood cultures before antibiotics, measurement of serum lactate and delivery of 20ml/kg fluid if hypotensive and/or lactate > 4mmol/L. 28 patients were identified (mean age 72 years; range 20-91). Adherence to Surviving Sepsis guidelines was low; 46% of patients only received 2 of the 4 key aspects. Compliance was good with lactate (75%) and fluid (79%) resuscitation but not antibiotics or blood cultures (32% and 25%). Only 2 out of 28 were reviewed by critical care outreach. **Conclusion:** Antibiotics are not given quickly enough in patients with severe sepsis nor are blood cultures being taken often enough before antibiotics.

KILLING TWO BIRDS WITH ONE STONE: DEVELOPING EDUCATIONAL SUPERVISION SKILLS AND COMPLETING FOUNDATION DOCTORS COMPETENCY ASSESSMENTS.

S Mada, J Clancy, J Metcalf
North Tees and Hartlepool NHS Trust and University of Newcastle upon Tyne

The Foundation portfolio requires “mini clinical evaluation exercises” (Mini-CEX), “direct observed procedures” (DOPs) and “case based discussions” (CbDs). We describe a method to deliver these. A Trust teaching fellow (SpR level) who had undergone training in educational supervision undertook weekly sessions on the Emergency Assessment Unit. He observed Foundation doctors assessing and managing emergency admissions then completed either a mini-CEX (having observed history taking, examination or communication skills); a DOPS assessment (after observing a procedure) or a CbD. Foundation doctors received feedback and identified learning needs and agreed learning plans. Foundation doctors and educational supervisors were asked to complete an anonymous questionnaire using a Likert scale and free text comments to elicit their views on the intervention. Over 6 months 16 sessions were delivered by the teaching fellow. Of 24 Foundation doctors 7 F1 and 3 F2 doctors underwent assessments including 4 DOPS, 6 mini-CEX and 12 CbDs. Informal feedback has been positive with both trainees and teaching fellow

benefiting.

Conclusion: A teaching fellow attached to the MAU can provide focused feedback on management of acute admissions and help Foundation doctors complete their portfolios.

GASTROSCOPY AUDIT OVER 25 YEARS

Malcolm C Bateson
Bishop Auckland General Hospital and Ninewells Hospital Dundee

Endoscopy records have been scrutinised for the years 1979, 1991-2, and 2004. Oesophagitis is commonly linked with other peptic diseases of the stomach and duodenum. Increased peak acid output was observed in oesophagitis and is likely to be causal. Hiatus hernia has no convincing link with oesophagitis, but may be commoner in Scottish women with this condition. In 1991-2, 40% of normal endoscopy patients had a positive urease test for H Pylori and there was a strong age relationship. However, in 2004 only 22% of all endoscopy patients had a positive urease test, with no age trend. The strong association of duodenal ulcer with H pylori has been lost. H Pylori was found in only 38% of duodenal ulcer patients in 2004. Though prior therapy with antibiotics and proton pump inhibitors may be part of the explanation, it is likely that more duodenal ulcers are now iatrogenic. Barrett's oesophagus was a common finding, and often associated with other diseases. No new cases of achalasia were noted in 2004

Conclusion: Over 25 years the association between DU and positive test for H Pylori has become weaker. H Pylori is less common in all patients and achalasia may be less common than it was.

IS OBESITY A STATE OF GLUCOCORTICOID HYPERSENSITIVITY?

Akheel Syed, Christopher Redfern, Jolanta Weaver RVI, Northern Institute for Cancer Research, QE Hospital, Gateshead and University of Newcastle.

Clinical similarities between Cushing's syndrome and obesity/metabolic syndrome have led to speculation of a causative role for glucocorticoids (GC) in obesity. However, people with idiopathic obesity have normal circulating cortisol concentrations. As there is considerable inter-individual variation in GC-sensitivity, we set up a study to test the hypothesis that obesity was associated with enhanced GC-sensitivity. We performed dose-response studies of dexamethasone-induced suppression of IL-6 secretion in skin fibroblast cultures (in vitro GC-sensitivity) and very low dose overnight dexamethasone suppression test with 0.25 mg dexamethasone (ODST-0.25 mg; in vivo GC-sensitivity) in 12 subjects with idiopathic

obesity and 6 slim volunteers. On the basis of the *in vitro* studies, we were able to categorize subjects as obese-normosensitive (ONS) or obese-hypersensitive (OHS) to GCs. Furthermore, we found that ODST-0.25 mg resulted in a median suppression of cortisol from baseline of 24% in slim volunteers, 32% in ONS and 60% in OHS subjects. A cutoff of 50% suppression in cortisol from baseline in response to ODST-0.25 mg gave a sensitivity of 100% and specificity of 92% for distinguishing hypersensitive subjects from normosensitive people.

Conclusion: GC-sensitivity may have a causal role in obesity and ODST-0.25 mg may be used to identify GC hypersensitivity in obese people.

SCOPE TO IMPROVE DOCUMENTATION OF DNAR ORDERS. A RETROSPECTIVE STUDY

S Mada

University Hospital Of North Tees

120 DNAR forms were collected over one month. 86% were on medical patients and 14% on non medical patients (2% surgical, 3% orthopaedics, 3% ITU, 3% A&E, and 3% no documentation). 83% were permanent decision orders, 18 were temporary. In 75%, discussion was documented as having taken place with medical/nursing staff but in only 38% with patient's relatives and 13% with patients.

Clinicians making the decision had signed each form. 2% had not printed their name or dated the decision. In 82% of cases the decision was made by consultant or deputy, 12% by Senior House Officers or House Officers, 3% other and 2% not documented. 71% of the temporary DNAR (18%) were noted to have been reviewed, 73% were made permanent, 13% were cancelled and in 14% there was no documentation. 68% died on their current admission. 32% were discharged home.

Conclusion: Our audit shows scope to improve documentation of DNAR forms particularly patient and relative involvement. Patients who are the subject of DNAR orders sometimes go home. Issues relating to the continuing validity of DNAR orders in the community need addressing.

PRIOR RECOGNITION OF DIABETES MELLITUS IS ASSOCIATED WITH IMPROVED OUTCOME FOLLOWING STROKE

O'Brien RE, O'Connell JE, Hildreth AJ, Gray CS.
Acute Stroke Unit, Sunderland Royal Hospital.

Advances in management of DM may result in improved outcome following stroke in those with known DM. We studied prospectively 2096 patients admitted between Nov 97 and Oct 04, 1051. 313 (14.9%) were known to have DM. Median age was 75 years; those with known DM were younger (73.0 vs

75.0 yrs $p=0.001$). There was no difference in the prevalence of previous stroke, TIA, hypertension or AF between those with/without a previous history of DM. However, patients with DM had significantly more ischaemic heart disease (MI 18.2% vs 14.4%, angina 24.2% vs 18.3%) and were more likely to be on antiplatelet drugs (50.2% vs 41.7%) and lipid-lowering drugs (16.9% vs 11.6%). Stroke sub-types were similar in each group. Outcome was improved in patients with DM at 12-weeks (79.2% vs 73.2%) but not at 12-months (69.0% vs 67.0%). Those with known DM and high glucose and HbA1c had improved outcome at 12-weeks (85.4% vs 66.5%) and 12-months (75.0% vs 61.3%) compared to those without known DM but high glucose and HbA1c. High glucose and HbA1c in those without known DM, suggesting unrecognised DM, was associated with poor outcome compared to patients with DM irrespective of glycaemic control at 12-weeks (83.3% vs 66.5%) and 12-months (72.7% vs 61.3%).

Conclusion: Recognised DM is associated with improved outcome in stroke. The previously found association between DM and poor outcome may not apply because of improved management of risk factors.

DOES USE OF THE BLATCHFORD SCORE FACILITATE SAFE EARLY DISCHARGE OF PATIENTS WITH LOW RISK UPPER GI BLEEDING?

Thompson EC, Wells CW, Ashley D

University Hospital of North Tees

Our previous 2004 retrospective audit validated the Blatchford score as safe and effective in identifying patients admitted with upper GI haemorrhage that were at low-risk of re-bleeding and could be discharged early, without in-patient endoscopy. Following this audit the the Blatchford score was introduced to the emergency admission unit at North Tees. Reaudit of this change in practice has shown we are endoscoping significantly fewer low-risk in-patients thereby reducing the strain on endoscopy resources, and that the mean length of stay in hospital for low-risk patients has been reduced. We plan to extend the use of the Blatchford score to the emergency department.

Conclusion: Use of the Blatchford score allows bleeding risks to be stratified so patients can be discharged without in-patient endoscopy allowing resources to be focussed on higher risk patients.

EVALUATION OF A DEDICATED SHORT STAY UNIT FOR ACUTE MEDICAL ADMISSIONS

Heather Downing, Christopher Scott, Clive Kelly
Queen Elizabeth Hospital, Gateshead

For many short-stay medical admissions transfer to a standard medical ward is unnecessary. We developed a

Short Stay Unit (SSU) specifically for such patients and assessed its effectiveness.

All admissions to SSU over the first 3 weeks of 2006 were included and results compared to the corresponding period in 2005.

209 patients were admitted to SSU over 21 days (10 patients a day). This accounted for 38% of all admissions through the Medical Assessment Unit. Of these 170, (82%) went home within 48 hours. 31 patients (15%) were transferred to a base ward from SSU. There was 1 death on SSU. The mean length of stay was 33 hours but half the patients discharged from SSU went home within 24 hours. The overall length of stay across the Medical Unit for the 3 weeks was 4.6 days which was significantly lower than the same period a year earlier when the value was 5.5 days ($p=0.02$). The mean daily numbers of medical patients boarding on non medical wards was also lower during the study period than a year prior (11 versus 18; $p = 0.035$).

Conclusion: The introduction of an SSU has a positive effects on length of stay and medical boarding.

THE EFFECT OF A MULTIDISCIPLINARY TEAM DIABETIC FOOT SERVICE ON HOSPITAL BED OCCUPANCY AND MRSA BURDEN

ST Wahid, S Tetchner, R Ellis, JH Parr
South Tyneside NHS Foundation Trust.

We reviewed the efficacy of our District MDT diabetic foot service. In the 2 years since the service has been established we have seen a reduction in total admissions of 49.6% (133 vs 66), number of patients admitted (59.4%, 101 vs 60), readmission rate (18.8% vs 8.3%, $p=0.042$), mean[95%CI] length of hospital stay (5.7[0.9-13.4] days, $p=0.042$), positive first time MRSA wound swabs (56%), and reduction in length of time patients remain positive for MRSA (3.6 vs 1.7 months, $p=0.02$).

Conclusion: Our MDT-Diabetic-Foot-Service has reduced hospital bed occupancy due to diabetic foot complications and MRSA burden.

Invited Lecture

GENES AND DIABETES: RELEVANCE TO CLINICAL PRACTICE

Professor Mark Walker

Professor of Molecular Diabetic Medicine

University of Newcastle upon Tyne

Type 2 (non-insulin dependent) diabetes) is a heterogeneous condition. Certain specific sub-types show a clear inheritance pattern and great progress has been made in identifying the responsible genes. The single adenine to guanine 3243 mitochondrial DNA mutation causes the syndrome of maternally inherited diabetes and deafness. Mutations in at least 6 genes cause maturity onset diabetes of the young (MODY). The identification of these causal mutations has had a dramatic effect upon patient management and treatment. Genes involved with the development of the more common form of type 2 diabetes have also been identified, and include variants in the *PPARG*, *KCNJ11* and *TCF7L2* genes. Unlike the causal MODY mutations, these variants are comparatively common in the general population and act by increasing susceptibility towards the development of diabetes. The challenge is how to use this information to develop strategies for the prevention and treatment of type 2 diabetes.

ASSOCIATION BUSINESS

Date of next meeting: 10.00 am Saturday 10 March 2007 Royal Victoria Infirmary.

Abstracts from Consultants, SpRs, Junior Doctors and Medical Students are all welcome. Presentations should reflect the range of clinical medical practice, including original research, clinical series, audit and case reports. Please submit by email (150 words with short conclusion) before beverly.hailstone@ncl.ac.uk with the abstract in an attached Word file. Also please e-mail the names of any new consultant colleagues, or your own name if you are not on the mailing list. Meetings are CME approved.

The Dewar Research Workers prize: Congratulations to Dr jjjThe closing date for this year's prestigious Dewar Research Worker's prize which includes £500 cash award is 30/9/06. Entries should be in the form of a written account of the research work (less than 1,500 words).Further details available from Professor Roy Taylor, Royal Victoria Infirmary or beverly.hailstone@ncl.ac.uk

President
Professor PH Baylis

Secretary
Professor R Taylor

Proceedings of the Association of North of England Physicians

“...the demographics of HIV in the UK has changed over the last decade. Clinicians should consider HIV in their differential diagnosis even in elderly patients and seek a history of potential HIV exposure.”

“...There is poor understanding of the co-morbidity of inflammatory joint disease and its contribution to premature mortality”

**Abstracts of meeting held at Royal Victoria Infirmary
Saturday 10 March 2007**

March 2007

MANAGING IMMUNOSUPPRESSION IN INFLAMMATORY BOWEL DISEASE IN THE COMMUNITY

Paul Flanagan, Helen Elwell, Andrea Whitehead, Nick Thompson
Freeman Hospital, Newcastle upon Tyne.

Immunosuppression is commonly used in the treatment of IBD. There is increasing pressure for monitoring to be delivered in primary care. We identified 89 patients on immunosuppression; 80 on azathioprine or 6-MP, 9 on methotrexate. Mean number of blood tests was 4.9 over one year. All new patients had initial monitoring as recommended. One patient stopped medication due to test abnormality. In patients on Azathioprine or 6-MP, 81% of tests were carried out within the target time frame, with Methotrexate only 32% of tests were within target.

Conclusion: Initial monitoring is per recommendations but subsequently targets are missed. Co-ordination with primary care should improve this and result in fewer hospital appointments. Drug complication rates are low.

PATIENT OUTCOMES FROM INVOLVEMENT IN MEDICAL STUDENT TEACHING

Swann R, Richardson D, Laidler L, Noble D, Lamb A, Wardle J, Metcalf JV
University Hospital of North Tees / University Hospital of Hartlepool

The effect of patients' involvement in medical student teaching is generally reported as positive. However literature regarding adverse outcomes is scant. We determined positive and negative effects on patients' health from teaching involvement by distributing questionnaires to all patients involved in 3rd year medical student teaching over one term. 193/296 completed questionnaires were returned. 187/193 patients found the sessions enjoyable, 34/193 reported improved mood. 2 respondents reported mood deterioration. 2 described adverse health effects but these were transient and despite this both patients would agree to further involvement in teaching.

Conclusion: Involvement in teaching has positive effects on patients and even those few reporting adverse effects continue to volunteer.

CYSTIC FIBROSIS AND PREGNANCY

SJ Doe, J Thompson, AD Gascoigne, SJ Bourke
Newcastle Adult Cystic Fibrosis Centre, Royal Victoria Infirmary

Although males with cystic fibrosis (CF) have azospermia, females have normal fertility and many undertake pregnancy and parenthood despite their medical problems. Over the last 15 years, 232 patients

(age 16-60 years; 102 female) have attended the CF Centre. There have been 25 pregnancies in 20 women, with 24 live births (1 ectopic). 3 further patients had termination of unwanted pregnancy. Mean age at pregnancy was 21 yrs. Mean FEV1 was 65% predicted; 14 (70%) had chronic *pseudomonas aeruginosa* infection; 7 (35%) had diabetes; 17 (85%) had pancreatic insufficiency. Many had impaired nutrition with a mean BMI of 18.6. There were 17 vaginal deliveries and 5 caesarean births. No child had CF but one had congenital heart disease. In 10 (50%) cases the patient's partner had been tested for CF mutations (all were negative). There were no maternal deaths but 2 patients subsequently underwent lung transplantation and 2 patients died leaving young children (ages 5 and 7 years).

Conclusion: Pregnancy is a formidable undertaking in CF but maternal and foetal outcomes are generally favourable in selected patients.

THE ELDERLY ACUTE CORONARY SYNDROME PATIENT: A NEGLECTED POPULATION?

J Turley, AP Roberts, A McDermott, PC Adams
Department of Cardiology, Royal Victoria Infirmary, Newcastle upon Tyne, UK, NE1 4LP.

Cardiovascular disease is the commonest cause of death in the elderly. What is our experience of secondary prevention in this group? We retrospectively analysed our Myocardial Infarction National Audit Project (MINAP) database 2003-2006. Data was collected from hospital admission to discharge. 530/1501 patients were age >75 yrs (mean 83.6yrs). When divided by age into <50 yrs, 50-75 yrs and >75 yrs, the in patient mortality was 0, 4, and 17% respectively. Aspirin was prescribed to 99, 94 and 90% of patients in the 3 groups respectively, ACE-I in 85, 83 and 66%, beta blocker in 94, 82 and 73% and statins in 96, 96 and 90% respectively.

Conclusions: The elderly ACS patients form a high-risk group. Our data show greater numbers can benefit from standard treatment than suggested by the published literature.

RADIATION EXPOSURE TO CARDIOLOGY INPATIENTS: WHAT IS THE HIDDEN RISK?

RIR Martin, AJ Turley, PC Adams
Department of Cardiology, Royal Victoria Infirmary, Newcastle upon Tyne, UK, NE1 4LP.

The dose effect of radiation exposure is assumed linear, even at low doses. 1mSv adds an excess lifetime risk of fatal malignancy of 1:20,000. This equates to a risk of 1:1000 for every thousand Chest X-ray equivalents. We surveyed the cumulative radiation exposure for cardiology in-patients from July - November 2006. 93

patients were surveyed. 51 were male, median age 79yr (22-96yrs), 22 were under 65. Cardiology procedures included CXR, perfusion scans, RF ablations, pacemaker insertions and percutaneous angiography and intervention. For cardiology procedures the median (max-min) exposure for those under 65 was 0.09 (0.02-34) mSv and 0.2 (0.02 – 58) mSv for those over 65yrs equating to 4.5 (1-1700) and 10 (1-2900) CXRs respectively. For all procedures (cardiology plus others including CTs bariums etc) the figures were 2.1 (0.02-41) and 11 (0.02-101) mSv equivalent to 105(1-2050) and 550 (1-5050) CXRs.

Conclusions: Cardiology related exposure was low in most patients in comparison to total exposure but was a higher proportion of the total dose in younger patients. Further radiation in young patients may create a population whose excess risk of iatrogenic malignancy is similar to the risks of their invasive procedures.

THE USE OF CRP/ALBUMIN RATIO TO PREDICT OUTCOME IN ACUTE ILLNESS

Eleanor Cairns, Emily Fairclough, Jennifer Hamilton and Clive Kelly.
Queen Elizabeth Hospital, Gateshead

We have shown the Medical Early Warning Score (MEWS) can predict mortality and length of stay. However the accuracy of the prediction declines with age in patients over the age of 70 years. We have extended our original survey to assess the relationship of both CRP and albumin to MEWS, and to assess the value of an individual's CRP/albumin ratio in predicting outcome independent of age. We assessed 103 consecutive admissions to MAU in early 2006. Outcome and subsequent length of stay were noted. The data was added to that collected in our original survey (2004) to measure outcome data for 300 acute admissions. We demonstrated a strong correlation between MEWS score and CRP {positive} and albumin (negative) on admission across the whole age spectrum for 300 patients. There was a strong correlation between MEWS score and CRP/albumin ratio ($R=0.88$, $p<0.001$). Overall mortality was 5%. Mean values for the CRP/albumin ratio were significantly lower in survivors (1.3) than in those who died (4.6) [$p<0.01$], but the positive predictive value of a raised ratio (>2) for death was poor by comparison with that of an elevated MEWS score (>4) at all ages.

Conclusions: In spite of limitations in the elderly MEWS remains the gold standard for assessing outcome in acute medical admissions. However, patients with a raised CRP and low albumin (ratio >2) often do badly independent of age, probably as a result of acute deterioration of an underlying chronic condition

GOLD STANDARDS AND FALSE GODS!"

Dr J Mathew

Sunderland Royal Infirmary

The gold standard for the diagnosis of tuberculosis is a positive culture. Cultures may not become positive for weeks so decisions to treat have to be based on clinical suspicion. In 2005 eight false positive cultures of *M. tuberculosis* occurred in Sunderland. One cluster involved six patients. Genetic typing of isolates of MTB from 2004/5 showed that other patients were clustered appropriately from their contact histories but this cluster of six patients had no contacts despite the *M tuberculosis* isolated having the same genotype. The laboratory error was due to contamination of the nozzle of a wash-bottle used to add sodium hydroxide to destroy contaminating bacteria.

Conclusion: Never believe anyone who believes gold standards are infallible.

DELAYS TO PERMANENT PACEMAKER IMPLANTATION: AN EXPLANATION FOR LOW IMPLANTATION RATE IN THE NORTHERN NETWORK OF CARDIAC CARE

Michael S Cunningham, Christopher J Plummer, Adam K McDiarmid, Janet M McComb
Freeman Hospital, Newcastle upon Tyne

We investigated the reasons for our low regional permanent pacemaker (PPM) implantation rate. Hospital records of 95 consecutive patients having PPM at Freeman Hospital from 1/6/06–30/8/06 were studied. 48 had urgent PPM insertion: median delay from symptoms to insertion was 14 (0-13321) days. 47 had elective PPM insertion: median delay 249 (33-7505) days. 22/47 elective cases had prior hospitalisation with bradycardia-related symptoms and overall, 26/95 (27%) had ACC/AHA Class I/IIA pacing indications previously missed. **Conclusion:** There are significant delays to PPM implantation. Failure to recognise PPM indications is common and may contribute to low pacing rates.

IRON DEFICIENCY ANAEMIA – HOW GOOD ARE WE IN ADHERING TO BSG GUIDELINES IN THE NORTH-EAST OF ENGLAND

Helen Cooper, Anjan Dhar
Bishop Auckland General Hospital

We identified all patients with a low Hb value in primary and secondary care in South Durham between Oct 2005 - Mar 2006 and audited their management against the British Society of Gastroenterology (BSG) guidelines. Inclusion criteria were: Hb <13 g/dL (males) and <12 g/dL (females), and MCV <76 fL. Exclusion criteria were pregnancy, age <16 , post-op,

post-natal, deceased, other obvious non-GI causes, or refused investigation. 96 patients were reviewed, M: F =34:62, 79% age >50, 77% females were post-menopausal. 20% used NSAIDs or aspirin. Upper GI symptoms were present in 20%, and lower GI symptoms in 12%. 5% had serum ferritin measured, 1% serum iron and TIBC. Menstrual history was not documented in 24% of premenopausal women. Only 4% had dietary history documented and none had blood donation documented. 20% had a rectal examination and 9% urine testing. Anti-endomysial antibody was measured in only 11% of patients (all negative). 3% had

small bowel biopsy (all normal). Upper GI endoscopy was carried out in 32% of patients, the most common finding being normal, then peptic ulcer. 17% had other investigations, most commonly CT. 32% of patients had a definite diagnosis (13 tumours, 5 benign 8 malignant all in patients >50 yrs.)

Conclusion: Not all cases of iron deficiency anaemia are being investigated according to BSG guidelines. We are bad at dietary and menstrual history, rectal examination and referring patients for GI tests.

Invited Lecture PBC IN OUR REGION

Professor Oliver James

Pro Vice Chancellor of Medical Sciences, Faculty of Medical Sciences
The Medical School Newcastle University

In our population of 3 million (which does not include Cumbria) we have identified 1000 cases of PBC giving a prevalence of 235/10⁶. Increased use of routine biochemical testing and batch immunological testing showing +ve antimitochondrial antibody (AMA) has resulted in much earlier diagnosis of PBC; 50% do not have the traditional symptoms of itch jaundice and fatigue at diagnosis. Follow up of patients for 5,613 patient-years (median 7.4 years) has shown an increased total SMR of 2.9 and an increased SMR of 1.7 even when liver deaths are excluded. The median age of presentation is similar in symptomatic and asymptomatic patients (62 v 63) as is the overall median survival (9.6 v 8 years) but liver mortality where present is delayed in those asymptomatic on presentation compared to those presenting with symptoms (24 v 17 years).

PBC is progressive. Only 5% of those living 20 years after diagnosis have no symptoms of liver disease.. If there is an effective treatment for PBC it should be started early when the patient is asymptomatic analogous to treatment of asymptomatic hypertension. The increased and the local availability of liver transplantation (OLT) has transformed the management of late PBC. 39 patients (9% of patients under 65) have had OLT. Our case controlled studies have examined putative causes and risk factors for PBC and shown increased odds ratios for a number of genetic autoimmune and environmental factors. Obstetric pruritus, thyroid and coeliac disease, smoking, use of hair dye, appendectomy, tonsillectomy and shingles are all commoner in PBC. Geographical studies looking at spatial variation have also shown tantalising evidence of environmental factors with clusters of cases in the Byker and Forest Hall regions of Newcastle.

Much progress has been made. We know the disease is common, we know the antigen against which AMA is directed, we know a little about the multiple genetic and environmental factors responsible for the disease; we know more about the amount we don't know. For the future, our energies must focus on the disabling symptoms of the disease, particularly fatigue and itching, and the immunobiology and genetics of PBC.

Progress will be possible thanks to the cohort of patients, their serum, their DNA and their clinical details collected by friends throughout the region with research generously supported by Liver North.

ASSOCIATION BUSINESS

After 14 years as secretary Roy Taylor will be handing over the post to Clive Kelly at the summer meeting. We wish him well and thank him on behalf of all our members for his superb dedication to the association during his time as secretary. We hope to make a formal presentation to him at the summer meeting.

Date of next meeting: Friday 6th July James Cook University Hospital. CME approved. Abstracts from Consultants, SpRs, Junior Doctors and Medical Students are all welcome. Presentations should reflect the range of clinical medical practice, including original research, clinical series, clinical audit and case reports. Please submit by email (around 150 words) before May 14th to clive.kelly@ghnt.nhs.uk with the abstract in an attached Word file. Also e-mail the names of any new consultant colleagues, or your own name if you are not on the mailing list. **The Dewar Research Workers prize:** The closing date for this year's prestigious Dewar Research Worker's prize which includes £500 cash award is 30/9/07. Details available from Professor Roy Taylor, Royal Victoria Infirmary or beverly.hailstone@ncl.ac.uk

President

Professor PH Baylis

Secretary

Dr Clive Kelly

**Proceedings of the
Association of North of England
Physicians**

“...a minority of patients develop atrial fibrillation after adenosine injection which may precipitate life threatening ventricular arrhythmias in patients with Wolff-Parkinson-White syndrome”

“If the guidelines had been followed 240 (83.7%) would have received primary thromboprophylaxis. However only 43 (14.8%) received any thromboprophylaxis...”

**Abstracts of meeting held at James Cook University Hospital
Friday 6 July 2007**

THE ROLE OF TSH-RECEPTOR BINDING INHIBITORY IMMUNOGLOBULIN (TBII) AS A FIRST-LINE TEST IN THE MANAGEMENT OF HYPERTHYROIDISM.

Salman Razvi, Margaret Andrews John Parr, Shaz Wahid.

Departments of Endocrinology and Nuclear Medicine
South Tyneside District General Hospital

We investigated if measurement of serum TSH-receptor binding inhibitory immunoglobulin (TBII), a stimulatory antibody found in Graves' disease, could be used to establish the cause of hyperthyroidism in newly diagnosed patients. 266 patients referred in the preceding five years who had thyroid uptake scans and TBII measurements were evaluated retrospectively. TBII levels above 15 had a sensitivity of 84%, specificity of 95%, and positive predictive value of 97% and negative predictive value of 77% in diagnosing Graves' disease. Anti-microsomal antibody and thyroid ultrasound were less sensitive and specific.

Conclusion: Measurement of TBII can be used as a first line test in the diagnostic pathway of hyperthyroidism. This could reduce costs and inconvenience in a significant majority of hyperthyroid patients. Only those patients whose TBII levels are ≤ 15 need further tests to find the underlying cause of hyperthyroidism.

ANALYSIS OF SERUM AND URINE BIOCHEMISTRY IN PATIENTS ATTENDING A REGIONAL LITHOTRIPSY UNIT

Jhalini Jawaheer, John Sayer, Pauline Hogg
Freeman Hospital, Newcastle

A biochemical analysis of serum and urine was performed on 457 patients attending for lithotripsy for known renal calculi. Serum was taken for biochemical analysis including corrected calcium, ionised calcium, urate, bicarbonate, potassium and parathyroid hormone. A random urine sample was analysed for urine calcium/creatinine ratio prior to lithotripsy treatment. The most common biochemical abnormality was a raised serum uric acid, seen in 52 patients (11.4%). Overt hypercalcaemia was seen in 16 patients (3.5%), with underlying primary hyperparathyroidism being present in 8 of these patients. Hypercalciuria was detected in 40 patients (8.6%), which included 3 patients with overt hyperparathyroidism and hypercalcaemia.

Conclusion: Metabolic investigations may point to an underlying biochemical defect contributing to renal stone formation which may be amenable to therapy. Long-term management of renal stone formers should include education of patients with regard to diet and fluid intake and treatment of any underlying metabolic abnormality.

POTENTIALLY LIFE-THREATENING ADVERSE EFFECTS OF ADENOSINE: THE STING IN THE TAIL

AJ Turley, S Murray, J Thambyrajah.
Cardiothoracic Division, The James Cook University Hospital, Marton Road, Middlesbrough, TS4 3BW.

A 31-year old female was admitted to CCU with a narrow QRS complex tachycardia not relieved by carotid sinus massage. Following 12 mg of adenosine the cardiac rhythm degenerated into atrial fibrillation with ventricular pre-excitation. The patient remained haemodynamically stable and was successfully cardioverted with intravenous flecainide. The post-cardioversion 12-lead ECG demonstrated the classical features of Wolff-Parkinson-White syndrome. Adenosine is a short-acting anti-arrhythmic that slows conduction through the AV node and is used to terminate narrow complex tachycardias. Serious adverse events are rare and generally short lived because of its short half life. However a minority of patients develop atrial fibrillation after adenosine injection which may precipitate life threatening ventricular arrhythmias in patients with Wolff-Parkinson-White syndrome. Adenosine must only be given when continuous ECG monitoring and resuscitation is available.

Conclusion: Adenosine may lead to atrial fibrillation which in patients with Wolff-Parkinson-White syndrome may precipitate life threatening ventricular arrhythmias.

PRIMARY THROMBO-PROPHYLAXIS IN MEDICAL IN-PATIENTS: AN AUDIT OF CURRENT PRACTICE: A SOLUTION FOR IMPROVEMENT

B. Sethugavalar, H.M. Khor, A.R. Guhan
The James Cook University Hospital,

Incidence of venous-thromboembolism (VTE) among medical patients is estimated to be 20%, with primary thrombo-prophylaxis (pTP) reducing this by 50%. We audited our compliance with the SIGN guidelines (www.sign.ac.uk/guidelines). 289 in-patients on 11 medical wards including oncology were studied over a 4-day period. If the guideline had been followed 240 (83.7%) would have received pTP. However only 43 (14.8%) received any TP with 26 receiving LMWH and a further 17 already receiving warfarin for other indications.

Conclusions: The SIGN guidelines suggest more than 80% of patients should receive pTP. One solution is to consider pTP in every medical admission unless specifically contraindicated.

PLASMA GLUCOSE FOLLOWING EXERCISE IN TYPE 1 DIABETES; WHICH BASAL INSULIN TREATMENT IS BEST?

V. Arutchelvam, T. Heise, S. Dellweg, P. D. Home
Newcastle Diabetes Centre and Profil Institut, Neuss, Germany

Exercise results in exacerbation of both hyperglycaemia and hypoglycaemia in insulin users. We assessed the impact of exercise using three different basal insulin formulations. In a randomized study, participants were actively managed on each insulin for 4 weeks. The participants (n=47) then performed 30 minutes exercise 6 hours after their last injection. Monitoring continued for 3 hours. Following exercise the minimum plasma glucose, time to minimum plasma glucose and plasma glucose area under the curve were not different. However, numbers experiencing hypoglycaemia and numbers needing carbohydrate to prevent/treat hypoglycaemia were significantly lower with detemir and NPH compared to glargine. Minimum cortisol levels were higher with glargine. The findings are consistent with the expected more stable level of plasma free insulin with detemir during exercise.

Conclusion: In this study fewer patients needed carbohydrate to prevent/treat hypoglycaemia when treated with detemir and NPH compared to glargine.

CLINICAL UTILITY OF MYOCARDIAL TISSUE CHARACTERISATION BY DELAYED ENHANCEMENT MRI

Jenifer Crilly
Darlington Memorial Hospital

One of the many exciting applications of MR cardiac imaging is the identification of myocardial scarring and fibrosis using the delayed enhancement technique. Two case studies demonstrate this.

- 1) A 68 year old lady was diagnosed with AL (primary) amyloidosis and underwent treatment with standard alkylating agents. Transthoracic echocardiography showed no abnormality. Late enhancement MR images demonstrated global subendocardial enhancement not corresponding to any coronary territory, characteristic of cardiac amyloidosis.
- 2) Aged 42, he presented with chest pain. He had previously been in good health. He had clinical signs of severe heart failure with very poor LV function. Late enhancement MR images demonstrated extensive scarring in the septum, anterior wall and inferior wall. Coronary angiography was normal. The appearance was typical of cardiac sarcoid. Postmortem histology demonstrated a myocardial lymphocytic infiltrate, giant cells and extensive fibrosis particularly of the interventricular septum.

Conclusion: Cardiac MRI may enable non-invasive diagnosis of cardiac infiltrative disorders without the need for myocardial biopsy.

THE PROPORTION OF GI CANCERS DIAGNOSED VIA THE 2 WEEK RULE HAS DOUBLED IN THE LAST 2 YEARS

T J W Lee, R Swann, L Clipsham, E Carbro, A D Dwarakanath
University Hospital of North Tees and North of England Cancer Network

A retrospective audit of all 2 week rule referrals for suspected GI cancer in a 3 month period was conducted in July - December 2005. A follow up audit was performed in December 2006- February 2007. In 2005 23.7% of colorectal cancers and 24.3% of upper GI cancers were diagnosed via the 2 week rule. In 2007 50% of lower GI cancers and 55% of upper GI cancers were diagnosed via the 2 week rule.

Conclusion: The 2 week rule system may be being used more effectively by GPs who may be referring fewer patients.

ALCOHOL AS A CONTRIBUTOR TO ACUTE FLACCID PARALYSIS IN GUILLAIN-BARRE SYNDROME

BN Chandrappa, Tilo Wolf, Anjan Dhar
Bishop Auckland General Hospital and James Cook University Hospital.

We report an unusual presentation of Guillain-Barre syndrome (GBS) where alcohol appeared to play a role in the pathogenesis.

A young 40 year old male presented with 2 week history of progressive sensory and motor disturbances affecting all limbs. Examination revealed stigmata of chronic liver disease with jaundice thought to be due to excess alcohol intake as well as bilateral symmetrical areflexic quadriparesis with sensory deficits.

Electrophysiology and cerebrospinal fluid analysis showed atypical GBS. The patient was treated with immunoglobulin, thiamine and nutritional support and recovered. Previous reports have implicated alcohol both in the pathogenesis of acute axonal polyneuropathy and mimicking GBS.

Conclusions: Alcohol may be a risk factor for GBS and may itself mimic GBS.

Invited Lecture
ASSESSING EX-VIVO THROMBOGENICITY IN DIABETIC SUBJECTS

Professor Sally Marshall Marshall Professor of Diabetes , Arun Natarajan and Azfar Zamman,
University of Newcastle upon Tyne

The life expectancy of an individual with diabetes is reduced by 10-12 years. Cardiovascular disease is the main cause of this premature mortality and also causes considerable morbidity. The final acute event is often thrombus formation over an unstable atherosclerotic plaque. Clotting abnormalities are well described in diabetes. There is increased platelet activation and aggregation, with formation of thrombin, plasminogen activator inhibitor 1, tissue factor, von Willebrand factor and fibrinogen. Fibrinolysis is decreased. Although abnormalities in each of these pathways have been described *in vitro*, there has until now been no good global marker of *in vivo* thrombotic potential. The Badimon chamber provides an *ex vivo* model of arterial injury. The intimal layer is stripped away from porcine aorta, and the exposed media is placed inside the Badimon chamber, forming the thrombogenic substrate. Blood is then drawn over the aorta, under conditions of laminar flow at high shear rate, designed to approximate conditions in a partially stenosed coronary artery. The aorta, with adherent clot, is then fixed in formalin, stained and the area of clot formation quantified using computerised planimetry.

Using this technique, in preliminary studies, we have demonstrated similar thrombus area in non-diabetic subjects with and without coronary artery disease (CAD) and in Type 2 diabetic subjects without CAD. However, thrombus area in Type 2 diabetic subjects with overt CAD was significantly increased. All subjects took aspirin 75 mg daily. In cross-sectional analysis, there was no relationship of thrombus area to fasting blood glucose, HbA_{1c} or body mass index, or to any other measured clinical parameter. The surprising lack of an increase in thrombus area in the Type 2 diabetic subjects without CAD may be due to their relatively good cardiovascular risk factor control; all were taking statins and glycaemic and blood pressure control were modestly good. In the Type 2 diabetic patients with overt CAD, the increase in thrombus area suggests that they might benefit from even more aggressive cardiovascular risk factor management and perhaps higher dose aspirin and/or addition of other anti-platelet therapy.

We plan further studies comparing thrombus burden in Type 2 diabetic patients in poor and then good glycaemic control, in obese non-diabetic subjects and in non-diabetic and diabetic individuals who have recently had an acute coronary event. Studies assessing the response of thrombus area to increasing doses of aspirin, and to the addition of other drugs, may provide guidance for large-scale clinical trials of anti-platelet agents.

ASSOCIATION BUSINESS

Date of next meeting:

Saturday 3rd November University Hospital of Hartlepool. CME approved. Abstracts from Consultants, SpRs, Junior Doctors and Medical Students are all welcome. Presentations should reflect the range of clinical medical practice, including original research, clinical series, clinical audit and case reports. Please submit by email (around 150 words including a short conclusion) before 22/9/07 to clive.kelly@ghnt.nhs.uk. Also e-mail the names of any new consultant colleagues, or your own name if you are not on the mailing list.

The Dewar Research Workers prize: The closing date for this year's prestigious Dewar Research Worker's prize which includes £500 cash award is 30/9/07. Details available from Clive Kelly: clive.kelly@ghnt.nhs.uk

Professor Roy Taylor's dinner. A dinner is planned for Roy Taylor who stands down after 14 years as secretary of the association. The likely date is 5/10/07. Please mark this in your diary. More details to follow.

President
Professor PH Baylis

Secretary
Dr Clive Kelly

**Proceedings of the
Association of North of England
Physicians**

**Abstracts of meeting held at University Hospital of Hartlepool
Saturday 3 November 2007**

NATIONAL WEB-BASED SURVEY OF THE PRACTICE OF CHEST ULTRASOUND EXAMINATION FOR PLEURAL EFFUSIONS AMONG CHEST PHYSICIANS IN THE UNITED KINGDOM

A.R Guhan, P.T.Walker, G.S.Leen, G.P.Naisby
The James Cook University Hospital

Opinion is growing favouring chest physicians (CP) performing their own chest ultrasound examination (CUS) in patients with pleural effusions to improve efficiency and timeliness of the service. The current practice is unknown. All 869 consultant members of the BTS were invited by e-mail to participate in an on-line electronic questionnaire survey. Data from 203 completed questionnaires (27.4% return-rate) were available for analysis. 97 (48%) and 106 (52%) were consultants in District General Hospitals and Teaching Hospitals, respectively. The majority (64%) of CUS requests were to localize loculated fluid collections. Only 7 (3.4%) CPs in the UK performed their own CUS with 189 (93%) depending on their radiology departments, usually waiting more than one day for the test. Should CPs do their own bedside CUS? 129 (63.5%) supported this view with 167 (82%) supporting CUS training for SpRs. However, 185 (91%) were unaware of the Royal College of Radiologists (RCR) training guidelines for CPs acquiring CUS skills. **Conclusion:** The majority of chest physicians in the UK prefer to be CUS-skilled. Increased awareness of the Royal College of Radiology CUS training guidelines could be an impetus for this to be achieved.

PREVALENCE OF METABOLIC SYNDROME IN PATIENTS ADMITTED WITH ACUTE MYOCARDIAL INFARCTION

M Ali, K Joshi, L Chacko, S Kalimuthu, J Starkey, J Frazer, E Orugun

West Cumberland Hospital, Whitehaven

The metabolic syndrome comprises a cluster of factors; hyperinsulinaemia, low glucose tolerance, dyslipidaemia, hypertension and obesity. Its presence confers a two fold increase in relative risk of cardiovascular events.

We aimed to find in a prospective study the prevalence of metabolic syndrome among a cohort of patients admitted with acute myocardial infarction. Data was collected from 94 patients admitted with acute myocardial infarction and analysed according to the NCEP ATP III metabolic syndrome criteria (presence of ≥ 3 of following: waist circumference ≥ 102 cm in men or ≥ 88 cm in women; known hypertension or blood pressure $\geq 130/85$ mmhg; HDL-cholesterol < 1.04 mmol/dL in men or < 1.30 mmol/dL in women; triglycerides ≥ 1.7 mmol/dL; known diabetes mellitus or fasting glucose ≥ 6.10 mmol/dL).

56% of the patients (n=53) were male, 44% (n=41) female. 78% (n=74) were between 60-89 years of age, average age was 71 years. Average BMI was 27 Kg/m².

53% (n=24) of males and 47% (n=27) females had waist circumference ≥ 102 cm and ≥ 88 cm respectively. 16% (n=15) patients were known diabetics, 9% (n=8) were newly diagnosed with diabetes. 47% (n=42) patients were known hypertensive, 51% (48) had systolic BP of > 130 mmhg, and 32% (n=30) had diastolic of > 85 mmhg. 18% (n=17) patients had HDL < 1.04 mmol/dl, 29% (n=27) had TGs ≥ 1.7 mmol/dL, 51% (n=48) patients had LDL > 2 mmol/dl. Total cholesterol was > 4.0 mmol/dl in 56% (n=53) patients.

Conclusion: Overall, the prevalence of metabolic syndrome was 40% (n=38) in our cohort of patients. However not one of the patients had been labelled with the diagnosis of the metabolic syndrome.

ROLE OF ACUTE INFLAMMATORY MARKER AND D-DIMERS IN DIAGNOSIS OF AORTIC DISSECTION

M Ali, I Tetlay, I Maqsood, P Tekur, E Lavery, L Wojcikoz, K Willmer

West Cumberland Hospital, Whitehaven, Cumbria, UK

Urgent establishment of diagnosis and treatment is important in patients with aortic dissection (AD). So far, no blood test is recommended to aid diagnosis and very few studies have been carried out to identify the role of inflammatory markers and D-dimers in the diagnosis of AD. We assessed the role of inflammatory biomarkers and D-dimer for diagnosing AD, compared the levels of these markers in other potentially fatal causes of chest pain. Plasma D-dimer, C-reactive protein (CRP), white cell count (WCC) and platelet count were measured in 12 patients with AD and compared to levels in 12 patients with pulmonary embolism (PE), 12 with myocardial infarction (MI) and 12 with non-specific chest pain (NSCP). All AD patients had elevated D-dimer levels. Levels were significantly higher than in MI or NSCP patients (p=0.063) and higher but not significantly so than in PE patients (Mean 1524.10 $\mu\text{g/l}$ vs. 844.54 $\mu\text{g/l}$, p=0.242). CRP values were higher in PE (mean 108.45), MI (mean 74.09) and NSCP (mean 30.33) in comparison to AD patients (mean 19.92), but not significantly so (p=0.114). WCC did not differ significantly among various groups of patients (p=0.549). There was no differences in platelet counts. **CONCLUSIONS:** D-dimers are elevated in patients with AD compared to other groups. Inflammatory biomarkers are also raised in AD. We strongly recommend the measurement of D-dimer as a valuable addition to the current diagnostic work-up of patients with suspected AD.

ROLE OF VIRTUAL CT COLONOSCOPY IN DIAGNOSIS OF COLONIC LESIONS

Dr A Gupta, Dr M Ali, Dr. N Kurdo, Dr. U Sheikh, Dr B Javaid, Dr. L Huntley
West Cumberland Hospital, Whitehaven

CT colonoscopy is a commonly used diagnostic tool for patients who are elderly and frail or in whom colonoscopy is not carried out for other reasons. CT colonoscopy has high safety profile. We evaluated the role of CT colonoscopy in patients suspected of variety of colonic diseases. In the period May 2006 –May 2007 32 CT colonoscopies were carried out. Data was collected from electronic records and from patient notes. 62% (N=20) were female. The youngest was 50; average age 70 year. 84% (N=27) had only CT colonoscopy and 16% (N=5) had both CT colonoscopy and conventional colonoscopy. Referral indications were: 22% (N=7) suspected tumour, 19% (N=6) anaemia, 22% (N=7) failed/ incomplete colonoscopy, 6% (N=2) weight loss, 6% (N=2) per rectal bleeding and 6% (N=2) assessment of previous polyps. CT colonoscopy was normal in 34% (N=11) normal, showed diverticular disease in 28% (N=9), colonic polyps in 22% (N=7), cancer in 16% (N=5), other 22% (N=7). In 16% (N=5) cases, adrenal adenoma, hepatic cysts, ovarian cysts were noted or metastasis were found.

Conclusion: CT colonoscopy is effective in diagnosing colonic lesions. None of the major lesions were missed except one reported polyp was thought to be diverticular disease on flexible sigmoidoscopy. We strongly recommend CT colonoscopy as a diagnostic tool for colonic lesions, particularly in patients not suitable for colonoscopy, provided with the added benefit of simultaneous scanning of chest, abdomen and pelvis.

MANAGEMENT OF CARDIAC CHEST PAIN ON THE MAU - IS IT GOOD ENOUGH?

NF Kelland, A Mann, A Harney, and M El-Harari
Cardiology Department,
University Hospital of North Durham, Durham, UK

Patients presenting with cardiac chest pain with low risk features are frequently admitted to the Medical Admissions unit (MAU). We performed a retrospective audit to determine whether patients with acute coronary syndromes (ACS) are managed appropriately. Case notes of 130 of the 183 patients admitted to the MAU with chest pain of any cause during September 2006 were reviewed. Mean age was 65 ± 16.1 years. 54% were male. As expected, the majority of patients were of low TIMI risk score (0-2). Possible acute coronary syndrome was initially diagnosed in 55%. In those with non-ST elevation myocardial infarction, the proportion who were initially treated with anti-platelet (50%), anti-thrombotic (67%) and

anti-ischaemic agents such as beta blockers (25%) was much lower than that seen in coronary care units in previous studies.

Conclusions: There is a need to improve ACS management on the MAU.

IODINE INDUCED THYROTOXICOSIS AND FATAL THYROID STORM PRECIPITATED BY AN IODINE BASED CONTRAST AGENT AND INTRAVENOUS AMIODARONE

Laloo S, Hall J, Khan K, Meikle R, Mellor A, Nag S.
James Cook University Hospital

Amiodarone is an effective drug for ventricular tachyarrhythmias. It contains 37% iodine and a normal dose may deliver 20 times the recommended daily iodine dose. Amiodarone induced thyrotoxicosis (AIT) is a recognised complication presenting 4 months to 3 years after starting oral therapy. We present a case of fatal thyroid storm associated with the use of an iodine based contrast agent with intravenous amiodarone. A 53 year old lady presented with cardiogenic shock following an anterior myocardial infarction. Coronary angiography using the contrast agent Iomeron was followed by percutaneous coronary stenting. Intravenous amiodarone (loading dose 600mg/day followed by 300 mg/day) was commenced for ventricular tachycardia. Baseline thyroid function was normal (TSH 1.77 FT3 5.7). An asymmetric multinodular goiter was noted. Thyroid function deteriorated thereafter with a progressive rise in both serum free T4 and free T3. Peak levels of FT4 and FT3 were 98.7 and 7.0 pmol/l respectively. A diagnosis of AIT and thyroid storm was made and treatment was initiated with carbimazole 60mg/day and prednisolone 40mg/day. Thyrotoxicosis improved transiently (nadir Free T4 79.5 pmol/l) but was then refractory to therapy. Cardiovascular instability persisted despite ionotropic support and the patient died. She presented with features of both type 1 and Type 2 AIT on a background of a multinodular goitre. We believe that the iodine load in the angiographic contrast medium and amiodarone precipitated thyrotoxicosis and subsequent thyroid storm.

Conclusion: The case highlights the iodine load in radiographic contrast agents and in amiodarone which may precipitate thyroid storm in susceptible patients.

A STING IN THE TAIL-ADENOSINE, A COMMONLY USED DRUG WITH POTENTIALLY LIFE-THREATENING ADVERSE EFFECTS.

AJ Turley, S Murray, J Thambyrajah.
The James Cook University Hospital.

A 31-year old female was admitted to CCU with a 2-hour history of regular palpitations. 12 lead ECG

showed narrow QRS complex tachycardia. Carotid sinus massage was unsuccessful and the patient received rapid boluses of intravenous adenosine. The cardiac rhythm degenerated into atrial fibrillation with ventricular pre-excitation following 12 mg of adenosine. She remained haemodynamically stable and was successfully cardioverted with intravenous flecainide. The post-cardioversion 12-lead ECG demonstrated the classical features of Wolff-Parkinson-White syndrome. Adenosine is a short-acting anti-arrhythmic that slows conduction through the AV node and is commonly used to terminate narrow complex tachycardias. Serious adverse events are rare and generally shortlived because of its short half life. A minority of patients develop atrial fibrillation after adenosine injection. However, the accessory pathway in patients with Wolff-Parkinson-White syndrome may have a short refractory period and thus be capable of fast atrio-ventricular conduction. This may precipitate life threatening ventricular arrhythmias.

Conclusion: Adenosine should only be administered in an environment where continuous ECG monitoring and emergency resuscitation equipment is available.

TYPE 1 DIABETES DIAGNOSED IN CHILDHOOD IS A CAUSE OF EXCESS MORTALITY-10 YEAR DATA FROM THE SOUTH TEES DIABETES MORTALITY STUDY

Connolly V, Bilous R, Jones S, Nag S
James Cook University Hospital

Type 1 diabetes is associated with increased mortality. But there is no clear evidence of an optimal age for cardiovascular risk factor intervention for people who develop diabetes in childhood. Current guidelines for cardiovascular risk factor modification in diabetic patients are applicable only to patients over the age of 40 years. In a population based retrospective cohort study of 376 diabetic subjects diagnosed below 18 years of age (Male 56%) we determined mortality rates and causes of death. Mean age of entry into study was 25 years (SD 11.9 years). Causes of death were obtained from death certificates and coded using ICD-10 rules. Median follow up was 11.6 years amounting to 4239 person years. Standardised mortality rates (SMR) for all cause mortality by age band were calculated. There were 22 deaths (6% of cohort; Male 59%). The crude mortality rate over the duration of the study was 5.8%. Standardised mortality rate for the cohort (SMR) was 5.41 (95% confidence intervals 3.39 – 8.18). The mortality rates for patients by age at entry to the study were 1-19 years 15.97; 20-39 years 3.02; 40-59 years 6.50 and 60-79 years 2.44. Circulatory disease mortality accounted for 40.9% of all deaths.

Conclusions: The large excess mortality from circulatory diseases in young patients suggests that the

age threshold for intervention should be lower than current recommendations.

LYMPHOMA IN PATIENTS WITH RHEUMATOID ARTHRITIS

O'Callaghan A, Kelly CA
Queen Elizabeth Hospital Gateshead

The prevalence of lymphoma is known to be increased two fold in patients with rheumatoid arthritis (RA) and relates in part to disease severity. Recent advances in therapy now mean that a monoclonal antibody to B cells (Rituximab) is available to treat both established lymphoma and aggressive RA. We describe a case which may point the way to earlier intervention in RA patients at risk of lymphoma. A 52 year old lady with aggressive RA diagnosed 2 years earlier was admitted from the rheumatology clinic for investigation of weight loss and lymphadenopathy. Treatment with methotrexate and anti-TNF therapy had not produced major benefit in joint symptoms over the preceding 12 months. Axillary lymph node biopsy revealed high grade B cell lymphoma and treatment with R-CHOP was commenced with immediate and sustained response in lymphadenopathy and synovitis.

Conclusion: Rituximab has been used for B cell lymphoma for some time and has just been licensed for use in RA patients failing to respond to anti-TNF agents. These patients are at high risk of later lymphoma and earlier treatment of this subgroup with rituximab may reduce the probability of developing this complication.

THE PREVALENCE AND RELEVANCE OF UPPER LIMB MUSCULOSKELETAL DISEASE IN TYPE 1 DIABETES

N Ramchurn, C Mashamba, Narayanan K, Weaver J, Hamilton J, Heycock C, Saravanan V, Kelly C
Queen Elizabeth Hospital, Gateshead

Our group previously reported that upper limb musculoskeletal disease was common in type 2 diabetes and was related to other complications of diabetes and to HbA1c levels. We have extended the study to examine upper limb involvement in type 1 diabetes using similar methodology.

We identified 45 out patients with established type 1 diabetes by matching them for both gender and duration of disease with our previous group of type 2 diabetics. We examined them for the presence of locomotor disease using the GALS screening test followed by regional examination (REMS) of the upper limbs. 32 (70%) of our patients were male and the group had a median age of 45 years with median duration of diabetes of 18 years. GALS revealed evidence of locomotor disease in 26 (57%) with shoulder capsulitis (5), carpal tunnel syndrome (7), cheirarthopathy (9) and Dupuytren's (4) the most frequent findings. Capsulitis invariably coexisted with

other upper limb abnormalities and predicted the presence of retinopathy and/or neuropathy. The mean HbA1c was higher in patients with shoulder problems (9.1) than the rest of the group (8.6). These results were very similar to those found in type 2 diabetics although the prevalence of abnormalities was considerably lower in type 1 patients suggesting significantly less resulting disability.

Conclusions: Upper limb locomotor abnormalities are common in diabetes and associated with worse diabetic control and diabetic complications.

THE ROLE OF TSH-RECEPTOR BINDING INHIBITORY IMMUNOGLOBULIN (TBII) AS A FIRST-LINE TEST IN THE MANAGEMENT OF HYPERTHYROIDISM.

Salman Razvi, Margaret Andrews John Parr, Shaz Wahid.

Departments of Endocrinology and Nuclear Medicine South Tyneside District General Hospital

We investigated if measurement of serum TSH-receptor binding inhibitory immunoglobulin (TBII), a stimulatory antibody found in Graves' disease, could be used to establish the cause of hyperthyroidism in newly diagnosed patients. 266 patients referred in the preceding five years who had thyroid uptake scans and TBII measurements were evaluated retrospectively. TBII levels above 15 had a sensitivity of 84%, specificity of 95%, and positive predictive value of 97% and negative predictive value of 77% in diagnosing Graves' disease. Anti-microsomal antibody and thyroid ultrasound were less sensitive and specific.

Conclusion: Measurement of TBII can be used as a first line test in the diagnostic pathway of hyperthyroidism. This could reduce costs and inconvenience in a significant majority of hyperthyroid patients. Only those patients whose TBII levels are ≤ 15 need further tests to find the underlying cause of hyperthyroidism.

ANALYSIS OF SERUM AND URINE BIOCHEMISTRY IN PATIENTS ATTENDING A REGIONAL LITHOTRIPSY UNIT

Jhalini Jawaheer, John Sayer, Pauline Hogg
Freeman Hospital, Newcastle

A biochemical analysis of serum and urine was performed on 457 patients attending for lithotripsy for known renal calculi. Serum was taken for biochemical analysis including corrected calcium, ionised calcium, urate, bicarbonate, potassium and parathyroid hormone. A random urine sample was analysed for urine calcium/creatinine ratio prior to lithotripsy treatment. The most common biochemical abnormality was a raised serum

uric acid, seen in 52 patients (11.4%). Overt hypercalcaemia was seen in 16 patients (3.5%), with underlying primary hyperparathyroidism being present in 8 of these patients. Hypercalciuria was detected in 40 patients (8.6%), which included 3 patients with overt hyperparathyroidism and hypercalcaemia.

Conclusion: Metabolic investigations may point to an underlying biochemical defect contributing to renal stone formation which may be amenable to therapy. Long-term management of renal stone formers should include education of patients with regard to diet and fluid intake and treatment of any underlying metabolic abnormality.

POTENTIALLY LIFE-THREATENING ADVERSE EFFECTS OF ADENOSINE: THE STING IN THE TAIL

AJ Turley, S Murray, J Thambyrajah.

Cardiothoracic Division, The James Cook University Hospital, Marton Road, Middlesbrough, TS4 3BW.

A 31-year old female was admitted to CCU with a narrow QRS complex tachycardia not relieved by carotid sinus massage. Following 12 mg of adenosine the cardiac rhythm degenerated into atrial fibrillation with ventricular pre-excitation. The patient remained haemodynamically stable and was successfully cardioverted with intravenous flecainide. The post-cardioversion 12-lead ECG demonstrated the classical features of Wolff-Parkinson-White syndrome. Adenosine is a short-acting anti-arrhythmic that slows conduction through the AV node and is used to terminate narrow complex tachycardias. Serious adverse events are rare and generally short lived because of its short half life. However a minority of patients develop atrial fibrillation after adenosine injection which may precipitate life threatening ventricular arrhythmias in patients with Wolff-Parkinson-White syndrome. Adenosine must only be given when continuous ECG monitoring and resuscitation is available.

Conclusion: Adenosine may lead to atrial fibrillation which in patients with Wolff-Parkinson-White syndrome may precipitate life threatening ventricular arrhythmias.

PRIMARY THROMBO-PROPHYLAXIS IN MEDICAL IN-PATIENTS: AN AUDIT OF CURRENT PRACTICE: A SOLUTION FOR IMPROVEMENT

B. Sethugavalar, H.M. Khor, A.R. Guhan
The James Cook University Hospital,

Incidence of venous-thromboembolism (VTE) among medical patients is estimated to be 20%, with primary thrombo-prophylaxis (pTP) reducing this by 50%. We audited our compliance with the SIGN guidelines (www.sign.ac.uk/guidelines). 289 in-patients on 11 medical wards including oncology were studied over a 4-day period. If the guideline had been followed 240

(83.7%) would have received pTP. However only 43 (14.8%) received any TP with 26 receiving LMWH and a further 17 already receiving warfarin for other indications.

Conclusions: The SIGN guidelines suggest more than 80% of patients should receive pTP. One solution is to consider pTP in every medical admission unless specifically contraindicated.

PLASMA GLUCOSE FOLLOWING EXERCISE IN TYPE 1 DIABETES; WHICH BASAL INSULIN TREATMENT IS BEST?

V. Arutchelvam, T. Heise, S. Dellweg, P. D. Home
Newcastle Diabetes Centre and Profil Institut, Neuss, Germany

Exercise results in exacerbation of both hyperglycaemia and hypoglycaemia in insulin users. We assessed the impact of exercise using three different basal insulin formulations. In a randomized study, participants were actively managed on each insulin for 4 weeks. The participants (n=47) then performed 30 minutes exercise 6 hours after their last injection. Monitoring continued for 3 hours. Following exercise the minimum plasma glucose, time to minimum plasma glucose and plasma glucose area under the curve were not different. However, numbers experiencing hypoglycaemia and numbers needing carbohydrate to prevent/treat hypoglycaemia were significantly lower with detemir and NPH compared to glargine. Minimum cortisol levels were higher with glargine. The findings are consistent with the expected more stable level of plasma free insulin with detemir during exercise.

Conclusion: In this study fewer patients needed carbohydrate to prevent/treat hypoglycaemia when treated with detemir and NPH compared to glargine.

CLINICAL UTILITY OF MYOCARDIAL TISSUE CHARACTERISATION BY DELAYED ENHANCEMENT MRI

Jenifer Crilley
Darlington Memorial Hospital

One of the many exciting applications of MR cardiac imaging is the identification of myocardial scarring and fibrosis using the delayed enhancement technique. Two case studies demonstrate this.

1) A 68 year old lady was diagnosed with AL (primary) amyloidosis and underwent treatment with standard alkylating agents. Transthoracic echocardiography showed no abnormality. Late enhancement MR images demonstrated global subendocardial enhancement not corresponding to any coronary territory, characteristic of cardiac amyloidosis.

2) Aged 42, he presented with chest pain. He had previously been in good health. He had clinical signs of severe heart failure with very poor LV function. Late enhancement MR images demonstrated extensive

scarring in the septum, anterior wall and inferior wall. Coronary angiography was normal. The appearance was typical of cardiac sarcoid. Postmortem histology demonstrated a myocardial lymphocytic infiltrate, giant cells and extensive fibrosis particularly of the interventricular septum.

Conclusion: Cardiac MRI may enable non-invasive diagnosis of cardiac infiltrative disorders without the need for myocardial biopsy.

THE PROPORTION OF GI CANCERS DIAGNOSED VIA THE 2 WEEK RULE HAS DOUBLED IN THE LAST 2 YEARS

T J W Lee, R Swann, L Clipsham, E Carbro, A D Dwarakanath
University Hospital of North Tees and North of England Cancer Network

A retrospective audit of all 2 week rule referrals for suspected GI cancer in a 3 month period was conducted in July - December 2005. A follow up audit was performed in December 2006- February 2007. In 2005 23.7% of colorectal cancers and 24.3% of upper GI cancers were diagnosed via the 2 week rule. In 2007 50% of lower GI cancers and 55% of upper GI cancers were diagnosed via the 2 week rule.

Conclusion: The 2 week rule system may be being used more effectively by GPs who may be referring fewer patients.

ALCOHOL AS A CONTRIBUTOR TO ACUTE FLACCID PARALYSIS IN GUILLAIN-BARRE SYNDROME

BN Chandrappa, Tilo Wolf, Anjan Dhar
Bishop Auckland General Hospital and James Cook University Hospital.

We report an unusual presentation of Guillain-Barre syndrome (GBS) where alcohol appeared to play a role in the pathogenesis.

A young 40 year old male presented with 2 week history of progressive sensory and motor disturbances affecting all limbs. Examination revealed stigmata of chronic liver disease with jaundice thought to be due to excess alcohol intake as well as bilateral symmetrical areflexic quadriparesis with sensory deficits.

Electrophysiology and cerebrospinal fluid analysis showed atypical GBS. The patient was treated with immunoglobulin, thiamine and nutritional support and recovered. Previous reports have implicated alcohol both in the pathogenesis of acute axonal polyneuropathy and mimicking GBS.

Conclusions: Alcohol may be a risk factor for GBS and may itself mimic GBS.

Invited Lecture
ASSESSING EX-VIVO THROMBOGENICITY IN DIABETIC SUBJECTS

Professor Sally Marshall Marshall Professor of Diabetes , Arun Natarajan and Azfar Zamman,
University of Newcastle upon Tyne

The life expectancy of an individual with diabetes is reduced by 10-12 years. Cardiovascular disease is the main cause of this premature mortality and also causes considerable morbidity. The final acute event is often thrombus formation over an unstable atherosclerotic plaque. Clotting abnormalities are well described in diabetes. There is increased platelet activation and aggregation, with formation of thrombin, plasminogen activator inhibitor 1, tissue factor, von Willebrand factor and fibrinogen. Fibrinolysis is decreased. Although abnormalities in each of these pathways have been described *in vitro*, there has until now been no good global marker of *in vivo* thrombotic potential. The Badimon chamber provides an *ex vivo* model of arterial injury. The intimal layer is stripped away from porcine aorta, and the exposed media is placed inside the Badimon chamber, forming the thrombogenic substrate. Blood is then drawn over the aorta, under conditions of laminar flow at high shear rate, designed to approximate conditions in a partially stenosed coronary artery. The aorta, with adherent clot, is then fixed in formalin, stained and the area of clot formation quantified using computerised planimetry.

Using this technique, in preliminary studies, we have demonstrated similar thrombus area in non-diabetic subjects with and without coronary artery disease (CAD) and in Type 2 diabetic subjects without CAD. However, thrombus area in Type 2 diabetic subjects with overt CAD was significantly increased. All subjects took aspirin 75 mg daily. In cross-sectional analysis, there was no relationship of thrombus area to fasting blood glucose, HbA_{1c} or body mass index, or to any other measured clinical parameter. The surprising lack of an increase in thrombus area in the Type 2 diabetic subjects without CAD may be due to their relatively good cardiovascular risk factor control; all were taking statins and glycaemic and blood pressure control were modestly good. In the Type 2 diabetic patients with overt CAD, the increase in thrombus area suggests that they might benefit from even more aggressive cardiovascular risk factor management and perhaps higher dose aspirin and/or addition of other anti-platelet therapy.

We plan further studies comparing thrombus burden in Type 2 diabetic patients in poor and then good glycaemic control, in obese non-diabetic subjects and in non-diabetic and diabetic individuals who have recently had an acute coronary event. Studies assessing the response of thrombus area to increasing doses of aspirin, and to the addition of other drugs, may provide guidance for large-scale clinical trials of anti-platelet agents.

ASSOCIATION BUSINESS

The Dewar Research Workers prize: The closing date for this year's prestigious Dewar Research Worker's prize which includes £500 cash award is 30/9/07. Details available from Clive Kelly: clive.kelly@ghnt.nhs.uk

Professor Roy Taylor's dinner. A dinner is planned for Roy Taylor who stands down after 14 years as secretary of the association. The likely date is 5/10/07. Please mark this in your diary. More details to follow.

President
Professor PH Baylis

Secretary
Dr Clive Kelly

Proceedings of the Association of North of England Physicians

“... When endocrine symptoms and signs are at variance with biochemical findings, heterophile antibodies should be considered and tested for...”

“... Increased longevity in recent decades has confounded the predictions of actuaries and demographers, who as recently as the 1980s forecast that, as we maximised the gain from reduced early and middle life mortality, humanity would be faced with the fixed, ineluctable reality of ageing. But, contrary to these forecasts, the rate of increase in life expectancy has not slowed...”

**Abstracts of the meeting held at the North Tyneside Hospital
Saturday 8 March 2008**

A STUDY ON THE EFFECTIVENESS OF AZATHIOPRINE IN THE TREATMENT OF INFLAMMATORY BOWEL DISEASE.

M.J McDonnell, S Thanaraj and A Dhar
Bishop Auckland General Hospital

58 of 440 patients with inflammatory bowel disease (IBD) were treated with azathioprine (aza); 9.1% of patients with Crohn's disease (CD), and 35.4% with ulcerative colitis (UC). Of those with CD 66% had colonic disease only, 14% small intestine disease, 20% both. Of the 29 patients with UC, 41% had total colitis, 35% left-sided and 24% distal colitis. 41% with CD were steroid free in a mean time of 5 months and 31% with UC in a mean time of 5.2 months after starting aza. 69% patients were noted to have a reduction in the number of flare-ups of their IBD within the first year of treatment with aza. Reduction in CRP in the first year of treatment compared to the previous year was achieved in 59% with CD and 48% with UC. Relapse despite treatment occurred in 34% of those with CD compared to 17% of those with UC. Myelotoxic effects occurred in 12.1% of patients.

Conclusion: Aza is safe and effective treatment for the maintenance of remission in IBD

PRIMARY THROMBO-PROPHYLAXIS (PTP) IN MEDICAL PATIENTS. ?MANDATORY PTP FOR ALL MEDICAL ADMISSIONS

JF Moody, CG Saysel, P Prakash, N Quinn, M Hamad, T Roberts, A Wood, AR Guhan.
James Cook University and Friarage Hospitals

The incidence of venous thromboembolism (VTE) among medical patients may be up to 20%, with pTP reducing this by 50%. SIGN guidelines (SG) compliance was only 18% when audited in our hospitals in 2006, despite 83% of patients being identified at risk. In the subsequent 12 months, the use of pTP was promoted and we re-audited our practice in 2007 on 11 medical wards during a 5-day period of study. 93% of patients were identified at risk of VTE. Minimal improvement in practice was demonstrable with overall compliance against SIGN guidelines only 22.5%.
Conclusion: Mandatory pTP for all MP unless specifically contraindicated is one solution for continuing poor compliance with SIGN guidelines.

HIGH PREVALENCE OF MULTIPLE RISK FACTORS FOR VENOUS THROMBO-EMBOLISM

AR Guhan, HM Khor, J Anderson, M Hamad, N Quinn, T Roberts, A Wood
James Cook University Hospital

75% of inpatient mortality from venous thromboembolism (VTE) occurs in medical patients (MP), even through post-surgical VTE receives higher profile. A recent audit of 283 patients showed 83% of patients should have received pTP as per SIGN guidelines (SG) but only 17% did. Here we classify the prevalence of VTE risk factors by age. 83.7% of patients were over 60 with 96% of them having 2 or more VTE risk factors.

Conclusion: Since compliance with our current system of case-by-case evaluation of need for pTP (as per SG) is less than optimal, we commend a policy of front-of-house mandatory pTP prescription for all medical patients over the age of 60 years unless specifically contra-indicated.

POST PNEUMONECTOMY PLATYPNOEA-ORTHODEXIA SYNDROME: UNCOMMON OR UNDER RECOGNISED?

AR Guhan, BG Higgins, SJP England, J O'Sullivan, JH Dark, IK Taylor
James Cook University Hospital, Freeman Hospital and Sunderland Royal Hospital

Post-pneumonectomy platypnoea orthodeoxia syndrome (PPPODS) is a recognised complication in patients following pneumonectomy. The symptoms are dyspnoea and deoxygenation when sitting or standing due to posture related right to left shunting across a patent foramen ovale (PFO). It can be associated with significant morbidity and is a cause of paradoxical cerebral embolism. It is cured by endo-vascular closure of the PFO. PPPODS is presumed rare, with less than 50 cases reported since first described by Schnabel in 1956. We report two patients who presented within a short interval of each other, raising the question of whether PPPODS is more under-recognised than uncommon especially as the prevalence of PFO may be as high as 25%.
Conclusion: PPPODS should be included in the differential diagnoses of post-pneumonectomy dyspnoea.

ERYSIPELAS OR ERYSIPELOID: IT'S ALL GOBBLERS

Thomas Lee
Wansbeck Hospital Ashington

We describe the case of a 47 year old turkey farmer presenting with 2 painful lesions on his left hand. He had performed a post mortem without gloves on a turkey that had died from turkey erysipelas. This condition is caused by *Erysipelothrix rhusiopathiae*, a gram positive rod. Human infection with *E. rhusiopathiae* is known as erysipeloid. Transmission to humans usually occurs through broken skin and may

present with a localised or diffuse cutaneous form or systemic infection which may be complicated by endocarditis.

CAN WE LEARN FROM NCEPOD REPORT INTO EMERGENCY ADMISSIONS.

Sarah Bishop, Alex Ferguson, Kenny Winchester, Aylwin Chick, Jamie Barbour
Queen Elizabeth Hospital, Gateshead

The NCEPOD report (Oct 2007) into emergency admissions recommends initial patient assessment by a doctor with sufficient seniority to implement a management plan. We analysed the time taken to implement a management plan in our Acute Medical Unit (AMU) from a doctor above the rank of F1. 201 (109 GP and 92 A&E) admissions were analysed over 7 days. Of the GP admissions 67%, 27%, 7% were clerked at <2hrs, 2-4hrs and >4hrs after arrival to hospital with appropriate investigation available in 67%, 24%, 9% and senior review and initiation of treatment in 20%, 27% and 53% respectively. The A&E figures were: investigations available in 76%, 14%, & 10% of patients and senior review and initiation of treatment in 21%, 32% and 47% at 2hrs, 2-4hrs and >4hrs after arrival on MAU.

Conclusion: In 53% of GP and 47% of A and E admissions senior review and initiation of treatment took >4 hours after admission to MAU.

UNDER USE OF EARLY WARNING SCORES IN AN ACUTE MEDICAL UNIT

Sarah Bishop, Alex Ferguson, Kenny Winchester, Aylwin Chick, Jamie Barbour
Queen Elizabeth Hospital, Gateshead

All patients admitted through our Acute Medical Unit should have an Early Warning Score (EWS) calculated on admission. If a score >4 is recorded or the patient has either a physiological or diagnostic 'trigger' then hourly observations should be done and the junior doctor informed to implement and document a management plan within 30 minutes. We audited 197 patient records. 53% had an initial EWS score of which 82% were correctly calculated. 22% had a EWS >4 or a physiological or diagnostic 'trigger' of which only 18% had hourly observations and 36% had a documented management plan. 7 day mortality for these patients was 9%. 4% went to critical care

Conclusion: Nursing staff and junior doctors are failing to use scoring systems that help identify sick patients.

A MODEL OF TEACHING GASTROINTESTINAL ENDOSCOPY

Christopher W Wells, Sally S Corbett, Mark R Welfare & J Roger Barton
Northumbria Healthcare NHS Foundation Trust and Newcastle University

Few models of teaching complex psychomotor skills exist in medicine. A model describing how best to teach endoscopy could potentially improve teaching. Semi-structured interviews were carried out with 20 members of the endoscopic community, asking them what made a good endoscopic trainer. The interview transcripts were analysed using the framework technique. A model of teaching endoscopy emerged, the core being the theory of scaffolding, whereby the trainer initially provides high input, which gradually fades in quantity and changes in quality as the trainee develops. Alongside this is the need to maintain trainee's motivation by providing a supportive and encouraging learning atmosphere.

BROKEN HEARTS & OCTOPUS POTS

AJ Turley, RJ Graham, JA Hall
James Cook University Hospital

Tako-tsubo cardiomyopathy or idiopathic apical ballooning syndrome was first recognised in Japanese patients. Its name refers to the end-systolic appearance of the left ventricle on ventriculography and its resemblance to the pots used to trap octopus. The condition is characterised by sudden onset chest pain with transient and often severe left ventricular dysfunction frequently precipitated by a stressful event. Patients with tako-tsubo cardiomyopathy present with features consist of an acute coronary syndrome and the syndrome is under-diagnosed. We present two cases admitted following stressful events who met the diagnostic criteria with acute chest pain, transient akinesis or dyskinesia of the left ventricle, new dynamic ECG changes and no significant epicardial coronary artery disease in the absence of recent head trauma, intracranial bleeding, phaeochromocytoma, myocarditis and hypertrophic cardiomyopathy. Both patients survived the condition.

CARDIAC BIOMARKERS IN PATIENTS WITH SEVERE SEPTIC SHOCK. DO THEY PREDICT SHORT-TERM OUTCOME?

AJ Turley, VJ Whittaker, AR Thornley, M Johnson, MA de Belder and JA Gedney.
James Cook University Hospital, University of Teesside

Myocardial dysfunction commonly occurs in patients with severe sepsis. We aimed to evaluate the value of cardiac biomarkers as predictors of 6 month mortality in patients with severe sepsis. A prospective observational study was carried out on patients admitted to ICU within 24 hours of the development of severe sepsis/septic shock. Sequential serum samples for N-terminal pro brain natriuretic peptide (NT-proBNP), troponin T (TnT), myoglobin and creatinine kinase (CK) were taken for 5 days after mechanical

ventilated. None of the cardiac biomarkers at any time point independently predicted mortality LV systolic function nor 6-month outcome. Only the APACHE II score was as an independent predictor (odds ratio 1.12 per point increment, $P < 0.05$)

Conclusion: The cardiac biomarkers NT-proBNP, TnT, myoglobin and CK are elevated in severe sepsis/septic shock. They are not markers of short-term mortality.

THE DEVELOPMENT OF AN EVALUATION TOOL TO ASSESS THE TEACHING BEHAVIOURS OF CLINICAL TRAINERS

Victoria Lavin, Mark Oliver, Pramintha Chitsabesan, Sally Corbett, John Spencer and Roger Barton
North Tyneside Hospital and School of Medical Education Development University of Newcastle

All doctors are expected to teach but only 30% are trained to do so. Reduced working hours mean there is a need to improve the quality of clinical teaching. A prototype assessment tool was developed to assess clinical trainers on the basis of the behaviours displayed during a teaching session. 18 consultants had sessions evaluated by 62 learners. The prototype produced normally distributed data, unlike any other teaching tools used at present.

Conclusion: This tool has potential to improve clinical teaching. Participants noted it benefited their teaching practices.

GOOD NEWS ON ILLNESS REPRESENTATION IN HEART FAILURE IN NEWCASTLE

Amy Lievesley, Philip C Adams, Christine Baker.
Royal Victoria Infirmary

People with heart failure (CHF) in the USA understand their illness poorly. Is this the case in the UK? We studied 21 individuals with CHF (43-81yrs, 12 men, mean ejection fraction 26%). They participated in semi-structured taped interviews of illness beliefs and mental state. All reported longstanding symptoms and negative consequences from CHF. 80% correctly associated their main symptoms with CHF. They had good control over their CHF. 90% rated their understanding of their CHF positively, confirmed by a cardiologist in 81%.

Conclusion: In contrast to US reports our patients were well informed and had adjusted well to their condition.

AWARENESS OF FUNCTIONAL HYPOSPLENISM IN COELIAC DISEASE

SA Young, R Thomson
Wansbeck Hospital, Ashington

Functional hyposplenism occurs in 30% of patients with coeliac disease(CD). As in patients who have undergone splenectomy they are predisposed to infection and

overwhelming sepsis. Current guidelines suggest pneumococcal vaccination. Are we aware of this risk and do we assess for hyposplenism? 15 consultant gastroenterologists were surveyed: 4 routinely assessed for the risk of hyposplenism and offered pneumococcal vaccination. In a 6 month audit 41 patients with CD were identified. Blood films looking for hyposplenism were only performed on 23/41 patients.

Conclusion: Awareness and adherence to current guidelines on detecting and treating hyposplenism in CD is low.

SPONTANEOUS PNEUMOTHORAX. A 4 YEAR REVIEW OF ADHERENCE TO BTS AND BAEM STANDARDS

M Harrison, D Tai-Kie, A Guhan, M Fenwick James Cook University Hospital

Compliance to BTS BAEM guidelines on management of spontaneous pneumothorax amongst A&E staff is 20 to 40%. We collected data for patients presenting over a 4.5 year period from 2002 to 2006 to an A&E department. We found only 43% of patients were treated correctly, the main problems being a lack of chest aspiration, too many drains and too many patients admitted. We have designed a new single easy-to-use guideline from the BTS originals, which would serve as a record and referral form, as well as incorporating appropriate discharge advice.

LYMPHANGIOLEIOMYOMATOSIS

Parakh S, Cresswell J, Guhan A, Whiteway J, Chadwick D.C
James Cook University Hospital

We report a case of Lymphangioliomyomatosis (LAM), in an otherwise healthy 28 year old female who presented with frank haematuria due to a large renal angiomyolipoma. LAM is a rare disease that is thought to be a forme fruste of Tuberous Sclerosis. It is associated with mutations in tuberous sclerosis gene and characterized by renal angiomyolipomas, hypertrophy and hyperplasia of smooth muscles within the lung parenchyma and lymphatic channels that result in characteristic cystic lesions. It is seen in women of reproductive age and oestrogen is thought to influence its development. Manifestations include progressive dyspnoea, pneumo and chylo-thorax, and hemoptysis. HRCT scan of the chest is abnormal, and considered adequate for diagnosis although open lung biopsy remains the gold standard for diagnosis. The treatment of LAM is evolving though hormonal manipulation remains the main stay. Lung Transplant is offered to those with advanced end stage lung disease but disease recurrence in the transplanted lung is recognized.

RHEUMATOLOGISTS ARE NOT PERCEIVED AS ABLE TO TREAT

SEPTIC ARTHRITIS BY CORE MEDICAL TRAINEES

A. Kirby, N Kumar, V Saravanan, B Griffiths, H Mitchison.

University Hospital North Durham

The study was based on ST2 interviews for CMT using data gathered from case scenario involving a rheumatoid arthritis patient on immunosuppressive drugs presenting with a septic arthritis. It was intended to highlight potential training concerns in regard to the CMT GIM curriculum. Only 2/23 candidates said they would inform the rheumatology department, 16/23 favouring orthopaedic referral. 5/23 candidates made no referral. Rheumatology input is not included in the acute GIM curriculum.

Conclusion: This is a deficiency in the curriculum and in candidates' knowledge, as this case warrants early rheumatology involvement.

GENUINE CARCINOID BUT SPURIOUS ADRENAL CARCINOMA – A CASE OF DECEPTION BY HETEROPHILE ANTIBODIES

S Nag, B Webb & W Kelly

James Cook University Hospital

A 60 year old female presented with anxiety, weight loss and flushing. Serum free T4 was 50 pmol/l (normal 12-23). Despite restoring T4 to normal, symptoms persisted. Urine 5-HIAA was elevated. At laparotomy a carcinoid tumour was removed from the left lobe of the liver. She remained clinically euthyroid, but serum T4 was elevated at 74 pmol/l, with detectable TSH of 0.31 MU/l. The results of the endocrine assays were incompatible with clinical findings. Serum cortisol was elevated (4000 nmol/l), suggesting Cushing's syndrome. Serum testosterone of 22 nmol/l (normal 0.7-2.8), and oestradiol of 2632 pmol/l in a postmenopausal female were suggestive of an adrenal carcinoma. LH and FSH were inappropriately suppressed for the postmenopausal state (5.2 and 5.1 IU) but with no evidence of adrenal or ovarian tumours on scanning. Laboratory error was suspected and heterophile anti-sheep antibodies were detected in the patient's serum. Ruthenium and streptavidin interference was absent. Tests using a different assay gave normal serum values.

Conclusion: When endocrine symptoms and signs are at variance with biochemical findings, heterophile antibodies should be considered and tested for.

DO WE USE LOW-MOLECULAR-WEIGHT HEPARIN SAFELY AND APPROPRIATELY IN CHRONIC KIDNEY DISEASE?

Rachel Davison. Sean Fenwick.

City Hospitals, Sunderland.

Low-molecular-weight heparin (LMWH) has largely replaced unfractionated heparin. In chronic kidney disease (CKD) the anticoagulation profile becomes unpredictable. Monitoring is not routine, and pragmatic reductions in dose are made. We measured anti-Xa levels in 138 patients stage 3-5 CKD to determine therapeutic efficacy and safety. Occasional subjects receiving thromboprophylaxis became formally anticoagulated, but almost 50% of the therapeutic group were under-anticoagulated.

Conclusion: In CKD thromboprophylaxis is normally safe, but current recommendations for therapy are potentially detrimental. Anti-Xa levels should be monitored.

DOES E.COLI URINARY TRACT INFECTION TRIGGER PSEUDOGOUT?

V.Saravanan, Department of Rheumatology, Queen Elizabeth Hospital

Chondrocalcinosis caused by calcification of articular cartilage is due to degenerative arthritis except in certain inherited metabolic disorders such as haemochromatosis and Wilson's disease. Many patients with chondrocalcinosis have no symptoms but a small proportion develop pseudogout – a painful effusion caused by pyrophosphate crystals that are shed into the synovial fluid from the calcified cartilage. The reason for this episodic shedding of crystals into the joint and the inflammatory effusion that follows is not known. We present three cases where pseudogout and E.Coli urinary tract infections co-existed

NEPHROGENIC FIBROSING DERMOPATHY – TREATMENT WITH TAMOXIFEN

P Mead, ZA Subhan

Cumberland Infirmary, Carlisle

A 57yr old man with renal failure secondary to IgA nephropathy on regular haemodialysis developed marked skin thickening of his hands and forearms. He had previously had gadolinium enhanced MRI scans for cervical spine and cerebellar abscess. End stage renal failure (ESRF) and exposure to gadolinium suggested nephrogenic fibrosing dermopathy. Skin biopsy confirmed the diagnosis. Physiotherapy was commenced without benefit. Treatment with prednisolone and tamoxifen resulted in dramatic improvement within four weeks.

POST-MORTEM IN THE CRITICAL CARE UNIT: A COMPARISON OF CLINICAL CAUSE OF DEATH AND AUTOPSY DIAGNOSIS

James Henry, Catherine Bartley, Gemma Kemp, Aylwin Chick

Queen Elizabeth Hospital, Gateshead.

As highlighted in the 2005 NCEPOD it is often difficult to establish the cause of death in those admitted to Critical Care Units on clinical grounds alone. We identified all adult Critical Care patients who died and had a Post Mortem (PM) over one year 2006-2007. We established the clinicians' clinical diagnosis and compared to the PM report. In 16 of the 37 cases (43%), the PM report revealed findings that had not been suspected clinically.

Conclusion: Post Mortems in critical care patients are of value. Liaison between pathologists, critical care doctors and physicians is important to further our understanding of these complex patients.

INVESTIGATIONS FOR SUSPECTED PULMONARY EMBOLISM (PE): ADHERENCE TO GUIDELINES REMAINS POOR

Jeebun V, Doe SJ, Worthy S, Forrest IA
Royal Victoria Infirmary, Newcastle upon Tyne

The BTS guidelines seek to provide a practical and evidence-based approach in the management of patients with suspected pulmonary embolism. Cases of CTPA-confirmed PE over 2.5 years were retrospectively analysed. Adherence to current guidelines was assessed.

1170 CTPAs were performed. Of 170 cases (14.6%) positive for PE, 139 notes were retrievable. In none of the cases was an assessment of clinical probability made. 62% were retrospectively identified as high probability. D-dimers were checked inappropriately in 76% of the high clinical probability group. 50 patients had a normal CXR with no cardiorespiratory illness, fulfilling criteria for V/Q scanning. Only 7 were performed.

Conclusion: BTS guidelines suggest proper use of d-dimers and clinical probability should result in a positive investigation rate of 25%. We fall well short of this.

Invited Lecture THE CHALLENGE OF HEALTHY AGE

Professor Tom Kirkwood
Director, Institute for Ageing and Health, Newcastle University

Life expectancy in the UK is continuing to increase at the rate of about two years per decade, which equates to around 5 hours per day. Increased longevity in recent decades has confounded the predictions of actuaries and demographers, who as recently as the 1980s forecast that, as we maximised the gain from reduced early and middle life mortality, humanity would be faced with the fixed, ineluctable reality of ageing. But, contrary to these forecasts, the rate of increase in life expectancy has not slowed. This continuing increase is now driven by the declining mortality rates of older age groups. At the same time, new scientific understanding of ageing is revealing that the intrinsic processes responsible for age-related frailty, disability and disease are more malleable than used to be thought. Ageing is driven not by genetic programming for death but by the gradual, lifelong accumulation of molecular and cell damage that arises through evolved limitations in the body's mechanisms for maintenance and repair of somatic tissues and organs. The efficacy of these mechanisms, which include DNA repair and antioxidant defences, is sufficient to maintain healthy function through the all-important reproductive years but not enough to prevent eventual degeneration and, ultimately, death. Under pressure of natural selection, at a time when because of extrinsic hazards life was truly nasty, brutish and short, our genes evolved a strategy of treating the soma as disposable.

The understanding that comes from the disposable soma theory of ageing helps us to understand both the relationship between intrinsic ageing and disease and also the influence of environmental and lifestyle factors on longevity and health in old age. For many diseases, age is the single greatest risk factor and recent research shows how the same kinds of molecular lesions that underpin conditions like osteoporosis, osteoarthritis and dementia are also contributors to intrinsic cell and tissue ageing. Since ageing is driven by the accumulation of damage, and since factors such as stress, poor environments and adverse lifestyle factors can exacerbate the accumulation of such damage, it becomes easy, at least in principle, to understand how these environmental influences affect ageing and health. In order to discover the exact contributions that are made to age-related frailty, disability and disease, detailed research such as the ongoing Newcastle 85+ Study will be required.

President
Professor PH Baylis

Secretary
Dr Clive Kelly

Proceedings of the Association of North of England Physicians

“...The diagnosis of Cushing’s syndrome should be considered in all patients presenting with osteoporosis...”

“...Increasing patient age is associated with poorer understanding of warfarin treatment...”

“...PPI use is common in patients developing clostridium difficile associated diarrhoea. PPIs could be stopped safely in the majority of patients to minimise risk...”

“...Sclerotic bony metastases may cause hypo- as well as hypercalcaemia...”

“...Providing numerical information [on colorectal cancer screening] did not diminish uptake of screening but did influence decision making. Numerical data should be included in information packs to allay concerns about adequacy of informed consent...”

**Abstracts of the meeting held at the Freeman Hospital
Thursday 3 July 2008**

CUSHING'S SYNDROME - A RARE CAUSE OF OSTEOPOROSIS?

Davison Rachel, Foulkes Amy, Narayanan K, Kelly C.
Queen Elizabeth Hospital, Gateshead.

A 72 year old man presented with severe back pain associated with loss of height. He had a kyphosis with radiological confirmation of vertebral osteoporosis. He had none of the usual clinical risk factors but was noted to have glycosuria, hypertension and a Cushingoid habitus. The diagnosis of Cushing's syndrome was confirmed on dexamethasone suppression tests, serum and urinary cortisol and ACTH assay. Low sex hormone levels were noted and felt likely to contribute to his fractures. Recent published evidence has shown that a significant percentage of patients who present with otherwise unexplained osteoporosis are hyperadrenal. The association with sex hormone depression is relevant and suggests a pituitary cause.

Conclusion: The diagnosis of Cushing's syndrome should be considered in all patients presenting with osteoporosis.

NUTRITION PROVISION FOR PATIENTS ON INTENSIVE CARE UNITS IN THE NORTHERN REGION

C R Dipper, N P Thompson et al

Critically ill patients are often undernourished. Malnutrition is associated with significant morbidity and mortality. We received data on nutritional support from all ICUs in the northern region and compared calories required, calories prescribed and calories delivered in those who had and had not been assessed by a dietician. Overall, there was a mean calorific deficit of 562 kCal/patient/day. Prescription of calories and provision of calories were lower in those not assessed by a dietician. There were substantial feed stoppages accounting for a deficit of 300Kcal/patient. Patients on parenteral nutrition appeared to receive a greater proportion of their feeds than patients fed enterally, although this was not significant. Vitamin and micronutrient supplementation was also less than recommended.

Conclusions: Nutritional provision is sub optimal on ITUs. Patients assessed by a dietician were more likely to be prescribed the correct number of calories.

ARE WE MANAGING THUNDERCLAP HEADACHE OPTIMALLY? EVIDENCE FROM AUDIT

R Petch, J Barbour
Queen Elizabeth Hospital, Gateshead

Thunderclap Headache (TH) is a common presentation to medical admission units. If subarachnoid haemorrhage (SAH) needs to be excluded then CT Head scan (<12 hours from admission) and lumbar puncture (>12 hours from headache onset) are the gold standards of management. We undertook a prospective audit during January 2008. 8 hospitals provided data for 55 patients presenting with TH and investigated for SAH. 16% (9/55) had SAH on CT. 89% (49/55) had CT within 12 hours, 13% (7/43) had LP <12 hours from onset of headache. Of the 6 patients failing the 12 hour CT target, 5/6 arrived soon after 17.00hrs. Opening pressure was recorded in 47% (20/43) of lumbar punctures.

Conclusion; A system of routine CT Head scans between 17.00 and 22.00hrs is needed to meet the 12 hour target for these patients. Lumbar puncture >12 hours from Headache onset including opening pressure is recommended.

GASTRIC POLYPS: A RETROSPECTIVE STUDY OF 8,890 UPPER GASTROINTESTINAL ENDOSCOPIES

U.A. Sheikh, R. Sultana, B. Javaid
West Cumberland Hospital, Whitehaven

A retrospective analysis of 8,890 oesophago-gastroduodenoscopy (OGD) procedures was performed to identify patients with gastric polyps. 278 patients (3.1%) were found to have gastric polyps, Clinical records of 197 cases were available. A significant female predominance (1:1.70) was seen 85% of the patients were aged 50 years or over. Mean age was 64 years (range 22-94). 23% of the polyps were 1-2 mm in size, 35% (n = 70) polyps were 3-10 mm, while 5.5% (n = 11) were >10 mm. In 43% multiple polyps were found. 68% of polyps were fundic gland type. The frequency of inflammatory, hyperplastic and adenomatous polyps was 12%, 8% and 3% respectively. One polyp was a xanthoma and one regenerative. Biopsies from 8.1% of polyps showed normal gastric mucosa. In five cases no biopsy was taken. Two polyps showed dysplasia, one of which was a carcinoma.

Conclusion: Fundic gland polyps were the most frequently encountered, normally as an incidental finding in patients undergoing OGD for a variety of indications.

AN AUDIT OF A PHARMACIST-LED HYPERTENSION CLINIC FOR PEOPLE WITH TYPE 2 DIABETES

I Haq, A Madathil, K Boyle, N Gammack, KR Narayanan

Queen Elizabeth Hospital, Gatehead

Our audit aimed to determine the effectiveness of a pharmacist led clinic established in 2005 for blood pressure (BP) management in type 2 diabetes.

Standards were set according to existing NICE guidance. 29 patients completed the audit process. 48% achieved target systolic BP and 72% diastolic BP. Subgroup analysis of microalbuminuria patients revealed that 40% were discharged with angiotensin converting enzyme inhibitors, 7% with angiotensin receptor II antagonists, and 20% with both agents, which evidence has shown is most effective. Compared with a previous audit a 41% improvement was seen in obtaining target systolic BP in patients with microalbuminuria.

Conclusion: The clinic has been effective in increasing the number of patients achieving target BP in type 2 diabetes.

IS THERE A RELATIONSHIP BETWEEN INCREASING AGE AND PATIENT KNOWLEDGE REGARDING WARFARIN THERAPY IN ATRIAL FIBRILLATION?

SA May PC Adams
Royal Victoria Infirmary

A semi-qualitative interview was administered to 46 patients. Mean age was 70 (SD 10.7) and mean time on warfarin was 27 months. Results from open questions were categorised to form discrete data and were analysed for trends and significance using the Exact Fisher-Freeman-Holton test. No statistically significant differences existed between men (n=27) and women (n=18) for any area of the interview. However increasing age was associated with poorer knowledge in 13 out of 15 areas of the interview (P<0.05). Overall, 100% remembered the name of the drug but only 46% remembered a risk discussion with their doctor and only 21% recalled mention of intra-cranial haemorrhage. 58% knew warfarin reduced the risk of stroke. Irregular heart beat or AF were the most common correct responses (47%) to the question: why are you taking warfarin?

Conclusion: Increasing patient age is associated with poorer understanding of warfarin treatment.

AN AUDIT OF PROTON PUMP INHIBITOR USE IN PATIENTS WITH CLOSTRIDIUM DIFFICILE ASSOCIATED DIARRHOEA

S Venkatachalapathy, T Lee, R Thomson
Wansbeck General Hospital

Proton pump inhibitors (PPIs) may be a risk factor for Clostridium difficile associated diarrhoea (CDAD). We conducted an audit of 130 cases of CDAD over a 1 year period. 83% of cases of CDAD were known to have received antibiotics in the preceding month. 47% of patients were on a PPI. A clear indication for PPI use was only found in 31% of patients.

Conclusion: PPI use is common in patients developing CDAD. PPIs could be stopped safely in the majority of patients to minimise the risk of contracting CDAD.

AN ELDERLY LADY WITH RHEUMATOID ARTHRITIS AND RAPIDLY PROGRESSIVE BREATHLESSNESS

Bryan Yates, Jennifer Hamilton, Catherine Bartley
Queen Elizabeth Hospital, Gateshead

An 80 year old lady with a 10 year history of rheumatoid arthritis was admitted with a 6 week history of progressive breathlessness. She had received a number of disease modifying agents and was currently on leflunomide. The differential diagnosis of bilateral CXR infiltrates in an immunosuppressed rheumatoid patient is discussed along with a review of the literature regarding the presumed diagnosis of leflunomide pneumonitis. Treatment regimens with particular reference to leflunomide are discussed.

Conclusion: Leflunomide should be considered as a likely cause of interstitial pneumonitis in patients with breathlessness taking the drug.

BLOOD GLUCOSE SCREENING OF ACUTE MEDICAL PATIENTS

R Erukulapati, S Anthony, S Pattman, K Pearson, J Pearson, J Macleod
North Tees and Hartlepool NHS Trust

NSF for diabetes Standard 2 aims to ensure that people with diabetes are identified as early as possible. There is also evidence that intensive management of in-patient hyperglycaemia is associated with improved outcomes. We collected data on 100 patients admitted to 2 MAUs over 2 months. 78% had capillary and/or venous lab glucose checked on admission. 12% had abnormal blood glucose values (random glucose ≥ 7.8 mmol/l or fasting glucose ≥ 5.6 mmol/l) suggesting new diagnosis of diabetes, impaired glucose tolerance or impaired fasting glucose and the need for further investigations. However only 2 had documentation of relevant symptoms, or evidence of further investigations or institution of appropriate treatment.

Conclusion: Patients with hyperglycaemia are not managed adequately when admitted with an acute illness. Opportunities to give lifestyle advice, confirm the diagnosis of diabetes and manage cardiovascular risk factors are being missed.

GENERALISED SKELETAL METASTASES AND HYPOCALCAEMIA? YOU MUST BE KIDDING!

T Fletcher, M Hamad, AR Guhan
The James Cook University Hospital, Middlesbrough

Hypercalcaemia is a recognised consequence of skeletal metastases. However, certain malignancies with skeletal metastases are associated with hypocalcaemia. Knowledge of this is by no means universal. We present a case of an 81 year old gentleman who presented acutely with symptomatic

hypocalcaemia (corrected calcium 1.33mmol/litre). Chest and spinal radiographs showed diffuse sclerotic shadowing. Clinical examination and investigations confirmed prostate cancer with sclerotic bony metastases. His hypocalcaemia was corrected with calcium supplementation and anti-androgen therapy. He remains clinically stable with conservative management. Hypocalcaemia in sclerotic skeletal metastases may be due to uptake of calcium by excessive osteoblastic activity, though other hormonal influences may also be involved.

Conclusion: Sclerotic bony metastases may cause hypo- as well as hypercalcaemia

CAN WE IMPROVE THE MANAGEMENT OF DIABETIC KETOACIDOSIS?

JH Parr, A Stewart, R Southon, H Reddy, S Marron, J Weir, ST Wahid
South Tyneside District Hospital, South Shields.

Audits of the management of DKA during 1995-97; 2001-03 and 2005-06, have found no improvement with time. In 2005-6 the major deficiencies were: delays in diagnosis, inadequate tests 4 hours after admission, excess fluid over 24 hours, inadequate potassium replacement, inappropriate bicarbonate administration, inadequate infection screen and inadequate use of antibiotics and heparin.

Conclusion: Failure to improve management may reflect changes in junior doctors' working patterns and their failure to follow protocols across shifts. We have seen early evidence of improvement using an integrated care pathway.

PAPER AND PENCIL, OR COMPUTER ASSESSMENT OF MINIMAL ENCEPHALOPATHY: EFFECT OF NITROGEN CHALLENGE AND LIVER TRANSPLANT

Hanan Mardini, Brian Saxby and Christopher Record
University of Newcastle upon Tyne

In 89 cirrhotic subjects we compared established paper and pencil tests (PHES) with a computer based battery (Cognitive Drug Research; CDR). The latter allows specific cognitive functions to be assessed. Composite scores were calculated from the CDR subtests to reflect five cognitive domains and results validated by comparison with six standard PHES tests. Tests were repeated in 21 patients after liver transplant and CDR scores in 24 patients 3 hours after a 108 g amino acid challenge. There was a high correlation between the two measures ($r = 0.748$; $p = 0.001$). Using multiple regression analysis MELD ($p=0.011$) correlated with PHES results. In contrast, the CDR domains Continuity of Attention and Quality of Episodic Memory were significantly related to venous blood ammonia levels ($p=0.001$). There were deteriorations in the CDR composite scores representing accuracy of

Working ($p=0.005$) and Episodic Memory ($p=0.001$) after amino acid challenge when blood ammonia increased from $63+36$ to $126+62\mu\text{mol/l}$ ($p=0.001$). Both PHE and CDR scores returned to the control range after liver transplantation.

Conclusion: CDR scores are valuable for the recognition of minimal hepatic encephalopathy. A web based version will enable more widespread use.

SUCCESSFUL MANAGEMENT OF HYPEREMESIS GRAVIDARUM WITH PREDNISOLONE: DEFINITION OF USUAL DOSE PROFILE

Al-Ozairi E, Waugh J, Taylor R.
Royal Victoria Infirmary, Newcastle upon Tyne

Severe hyperemesis gravidarum (weight loss $> 5\%$) can be controlled using prednisolone. 33 consecutive cases were identified over a 7 year period. The group had a median weight loss in pregnancy of 5.5kg (range 2.0 to 12.5kg), had been admitted on a median of 3.0 (range 0-9) occasions and had spent 7.5 (range 0-25) days on intravenous fluids. Continuing vomiting prevented oral steroid therapy in 14 women, and intravenous hydrocortisone (50mg tid; 2 women requiring 100mg tid) was used initially for 24 to 48 hours. 19 women commenced prednisolone 10mg tid, and this achieved suppression of vomiting within 48 hours in all but 2 women who required 15mg tid. After control of vomiting, the dose was continued unchanged for 7-10 days. After discharge, the dose of prednisolone was decreased at a rate of approximately 5mg per week.

Conclusion: Information on dose profile of prednisolone should assist management of this troublesome condition.

CONSENTING FOR COLORECTAL CANCER SCREENING. DOES PROVISION OF NUMERICAL DATA AND PICTOGRAPHS ON BENEFIT AND RISK EFFECT UPTAKE?

Imran Patanwala, Victoria Brocklebank, Chris Wells, Peter Trewby
Darlington Memorial Hospital

Information given to patients invited for CRC screening gives little numerical information on benefit or risk. We gave 239 subjects (Group 1) an enhanced information pack containing numerical information expressed pictorially, including numbers needed to screen to accrue benefit (862); cancers missed by screening (50%); effect on survival (none); numbers of CRC prevented by earlier polyp pick up (0.5% at 18 years). We asked which points most influenced subjects' decision on whether to be screened and compared responses to a matched group of 239 subjects (Group 2) sent the standard NHS pack.

Response rate was 53%. The use of pictographs with incorporated numerical data significantly influenced decision making ($p < 0.0001$) although did not influence overall decision on whether to be screened. Those wanting to be screened found the statement “*bowel cancer is the second commonest cause of cancer death*” had the highest positive impact. Those in group 1 not wanting to be screened found the statement “*the programme will miss 50% of cancers*” had the highest negative impact.

Conclusion: Providing numerical information did not diminish uptake of screening but did influence decision making. Numerical data should be included in information packs to allay concerns about adequacy of informed consent.

USEFULNESS OF CUMULATIVE FUNNEL PLOTS IN RELATION TO 30-DAY MORTALITY RATES FOLLOWING AN ACUTE CORONARY SYNDROME: ANALYSIS OF DATA FROM TWO CARDIAC CENTRES

AJ Turley, R Das, R Morley, AP Roberts, S Jamieson, MA de Belder, IU Haq
The James Cook University Hospital and Royal Victoria Infirmary

The EMMACE risk score is a validated model that predicts 30-day all cause mortality in ACS patients. Temporal hospital performance may be examined with cumulative funnel plots that allow a visual comparison of observed and predicted mortality. We analysed 30-day mortality for ACS from two regional cardiac centres. Cumulative funnel plots (Spiegelhalter) of observed and predicted mean performance on a case-series basis were generated. 1810 consecutive patients were identified. Hospital mortality was 7%, 30-day all-cause mortality was 7.7%. The observed and predicted mortalities were clearly visualised in the funnel plots.

Mortality for both centres was less than the control limits of the national mean.

Conclusions: Cumulative hospital performance can be

easily visualised using funnel plots. Real-time monitoring of performance is possible and should allow early assessment of variation.

CLINICAL AUDIT: SCREENING FOR DEPRESSION IN HIGH RISK PATIENTS

H Wilson, J MacLeod, S Babu
University Hospitals of North Tees and Hartlepool

NICE clinical guidelines for depression state that high risk patients should be screened for depression in hospital settings. We assessed the need for local guidelines regarding screening for depression and improve the quality of care given to patients at risk of depression. 78% of medical patients in general hospital settings had risk factors for depression but were not screened for depression. Little action (29%) was taken to assess or treat patients presenting with symptoms of depression.

Conclusion: Local guidelines to screen, assess and manage symptoms of depression would improve patient care.

MALNUTRITION IN A UK HOSPITAL POPULATION - WHAT DOES THE MALNUTRITION UNIVERSAL SCREENING TOOL REVEAL?

C.A. Lamb, J. Parr, M.D. Warren
North Tyneside General Hospital

NICE guidance on nutrition calls for assessment of nutritional status with appropriate action in all patients admitted to hospital. We screened 328 adult inpatients using the MUST (Malnutrition Universal Screening Tool) on a single day in 2007. Score 0 is normal, 2 or more confirms high risk of malnutrition. We found 33%, 23% and 77% of patients on medical, surgical/orthopaedic and ICU wards respectively had MUST scores of 2 or above.

Conclusion: Malnutrition as defined by MUST scores is common being present in over 40% of hospital inpatients.

ASSOCIATION BUSINESS

Date of next meeting: Saturday 8th March 2008 at North Tyneside General Hospital from 10am until 1pm

CME approved. Abstracts from Consultants, Trainees and Medical Students are all welcome. Presentations should reflect the full range of clinical medical practice including original research, clinical series, audit and case reports. Please submit by email (around 150 words including a short conclusion) by 21/1/08 to clive.kelly@ghnt.nhs.uk. Also e-mail the names of any new consultant colleagues or your own name if you are not on the mailing list.

President
Professor PH Baylis

Secretary
Dr Clive Kelly

Proceedings of the Association of North of England Physicians

“... Extensive investigations revealed the diagnosis of autoimmune-mediated limbic encephalitis. This case stresses the need ...to always consider organic causes for acute psychosis”

“[In the management of acute asthma]...the mean length of hospital stay in patients who received systemic steroids within an hour of arrival to hospital was 2.6 days compared to 3.6 days in the group where steroids were given an hour or more after arrival.”

“Manual activation is an important feature [of implantable loop recorders]. Devices must have sufficient storage capacity to allow for delayed manual activation following an arrhythmia. “

**Abstracts of the meeting held at Cumberland Infirmary, Carlisle
Saturday 1st November 2008**

UNINVESTIGATED IRON DEFICIENCY ANAEMIA PRESENTING WITH BOERHAAVE'S SYNDROME

Y Lim, M Kelly, P Carr

Darlington Memorial Hospital

A 17-year-old male presented with a 7 day history of nausea, violent vomiting and acute renal failure. On examination he had surgical emphysema over the right anterior chest wall. CXR showed significant pneumomediastinum. He had a past history of chronic intermittent abdominal pain and iron deficiency anaemia detected when he donated blood. CT did not demonstrate a leaking oesophagus but gastroscopy showed a healing oesophageal tear. In addition there was a pre-pyloric gastric ulcer causing gastric outlet obstruction. He responded to conservative treatment.

Conclusion: We believe this man's ruptured oesophagus was due to vomiting (Boerhaave's syndrome) in turn caused by peptic ulcer disease causing gastric outlet obstruction. This is only the second report of Boerhaave's syndrome associated with gastric outlet obstruction.

A RANDOMISED CONTROLLED TRIAL TO EVALUATE THE CLINICAL EFFECT AND COST EFFECTIVENESS OF TREATING UPPER LIMB SPASTICITY DUE TO STROKE WITH BOTULINUM TOXIN: ONE MONTH RESULTS

L Shaw, C Price, F van Wijck, M Barnes, L Graham, GA Ford, P Shackley, N Steen, H Rodgers on behalf of BoTULS investigators.
Newcastle University, Northumbria Healthcare Trust, Queen Margaret University, Edinburgh, Centre for Neurorehabilitation and Neuropsychiatry Newcastle, University of Sheffield

Botulinum toxin is used to treat spasticity after stroke, but impact on upper limb (UL) function is unclear. In this multi-centre randomised controlled trial, 333 participants were randomised to botulinum toxin plus upper limb therapy or upper limb therapy alone. The primary outcome measure was the Action Research Arm Test score (ARAT) at one month. Pre-defined success on the ARAT was achieved by 42 (25.1%) of the intervention group and 30 (19.5%) of the control group ($p=0.232$). Muscle tone (Modified Ashworth Scale) decreased by 1 point in the intervention and 0 points in control ($p<0.001$).

Conclusion: Botulinum toxin plus UL therapy does not improve upper limb function at one month.

REFERRAL PATHWAYS TO PULMONARY REHABILITATION

M Shipley, D Stock, J Reah

South Tyneside General Hospital

Current guidelines suggest there is no rationale for specific selection of patients to pulmonary rehabilitation. This study reports whether either the pathway to referral, age, or disability altered the outcome following rehabilitation.

Of 199 (58%) patients referred, 84 (42%) enrolled into the program and 57 (28%) successfully completed the programme. There was no significant difference in completion rates between patients referred from primary care compared to those referred from respiratory medicine. Patients referred from respiratory medicine had more severe pulmonary disease (FEV1 mean 1.53l v. 1.07l), but there was no difference in outcome from pulmonary rehabilitation.

Conclusion: These data support open referral from primary care to pulmonary rehabilitation.

PREVALENCE OF FRAGILITY FRACTURES AND OTHER RISK FACTORS FOR OSTEOPOROSIS IN PATIENTS ON INHALED STEROIDS

J Wallace, Y Shanshal

Queen Elizabeth Hospital, Gateshead.

Patients with COPD have been recognised to be at increased risk of osteoporosis and a pilot study suggests osteoporosis is currently under recognised. Our study identified 295 inpatients, aged 70 or over on inhaled steroids and ascertained the prevalence of fragility fracture and other risk factors for osteoporosis in this group. 36% had sustained a fracture, 44% of women, 28% of men aged 55 or over. There was a borderline association between steroid use and possible fragility fracture ($p=0.056$). Only 38% of those with a possible fragility fracture were on appropriate therapy. There was an association between recent fall and fragility fracture with 70% of the fragility fracture group having fallen within the past 2 years ($p=0.02$).

Conclusion: Inpatients on inhaled steroids have a high prevalence of falls and fractures. Both osteoporosis and falls risk should be addressed.

LIMBIC ENCEPHALITIS AS A CAUSE OF ACUTE PSYCHOSIS

MEAD PA, DAVISON RE.

Renal Unit, Cumberland Infirmary Carlisle

Confusion is a common cause for medical admission. We discuss a patient who presented with acute disorientation with auditory hallucinations. The picture was clouded by his recreational drug use. There were no focal neurological signs and CT scan of his head

was normal. He was detained by police because of his aggressive behaviour, but deteriorated with seizure activity, requiring sedation and intubation. Extensive investigations revealed the diagnosis of autoimmune-mediated limbic encephalitis.

Conclusion: This case stresses the need for closer liaison between physicians, psychiatrists and the police and the need to always consider organic causes for acute psychosis.

AN AUDIT OF OSTEOPOROSIS RISK ASSESSMENT IN PATIENTS TREATED WITH ANDROGEN DEPRIVATION THERAPY FOR CARCINOMA OF THE PROSTATE

VK Marrison, YS Shanshal
Queen Elizabeth Hospital, Gateshead

Androgen deprivation therapy (ADT) is associated with a reduction in bone mineral density and an increased risk of fracture. All patients with a risk factor for secondary osteoporosis, such as hypogonadism, should be assessed for evidence of osteoporosis and treated accordingly (Royal College of Physicians, 2000). We studied patients over the age of 65 years attending the urology clinic with a diagnosis of prostate cancer on ADT for greater than one year duration. Information regarding fracture history, previous DEXA scan and osteoporosis treatment was obtained. 40 patients were included. 2 (5%) patients had previous fracture over the age of 50 years. Only 3 (8%) patients had prior assessment with a DEXA scan. 4 (10%) patients were established on biphosphonate therapy.

Conclusion: Osteoporosis risk assessment in patients taking ADT is inadequate when measured against clinical guidance.

EFFICACY AND SAFETY OF RITUXIMAB IN A TNF ALPHA BLOCKER NAÏVE RHEUMATOID ARTHRITIS PATIENT WITH PREVIOUS ANTI-RHEUMATIC DRUG INDUCED B-CELL LYMPHOMA

A. Boulemden, M. Galloway, D. Wright, N. McKay
Sunderland Royal Hospital

A 59 yr old lady with seropositive rheumatoid arthritis failed to respond to sulphasalazine and was treated with methotrexate for 3 years, then azathioprine and methotrexate for 4 years. Subsequently a B cell neck lymphoma stage I occurred and then completely resolved within 3 months of azathioprine/methotrexate withdrawal. Her arthritis flared, which raised the question of the safety of further anti-rheumatic drugs. Our patient is currently in remission with no recurrence of her lymphoma after one year and two treatment courses of Rituximab as an unlicensed treatment.

Conclusion: Rituximab monotherapy in this case was safe and effective post immunosuppression induced B cell lymphoma.

REVIEW OF SYSTEMIC STEROID (SS) ADMINISTRATION IN ACUTE ASTHMA IN A DISTRICT GENERAL HOSPITAL.

R. Pagonda, M. Hewson
Cumberland Infirmary, Carlisle

Introduction: BTS guidelines state early SS in acute asthma give a better outcome and the Cochrane review 2001 states that acute asthma patients treated with SS within an hour of presentation are less likely to need hospital admission. We determined the time taken for patients admitted with acute asthma to receive SS and assessed benefit of early administration. We evaluated the management of 18 of the 38 adult acute asthma admissions from July'07 to June'08 who did not receive pre hospital SS. The mean length of hospital stay in patients who received steroids within an hour of arrival to hospital (33%) was 2.6 days (range 1 – 6 days) compared to 3.6 days (range 1 – 12 days) in the group where SS were given an hour or more after arrival (66%).

Conclusion: In our study early administration of SS in acute asthma reduced the length of hospital stay

THE DIAGNOSIS AND MANAGEMENT OF URINARY TRACT INFECTION IN HOSPITALIZED OLDER PEOPLE

HJ Woodford and J George
Cumberland Infirmary, Carlisle

We evaluated against established clinical and therapeutic guidelines our diagnosis and management of urinary tract infection (UTI) in hospitalized older people. Among the 265 patients (mean age 85.4) over diagnosis of UTI was common with 43.4% of patients not meeting diagnostic criteria. Only 32.1% of patients overall had any urinary tract symptoms (48.7% in the UTI group). Treatment given varied greatly. The average length of stay was 29.9 days.

Conclusions: More reliable criteria are needed to aid the diagnosis of UTI in hospitalized older people. Better adherence to clinical management guidelines may improve outcomes.

DO PATIENTS APPRECIATE RECEIVING A COPY OF THEIR OUTPATIENT CLINIC LETTER?

JH Topping, HC Mitchison
Sunderland Royal Hospital

The Department of Health has recommended patients should be offered a copy of all their outpatient correspondence. This was implemented as policy

within the department of Gastroenterology at Sunderland Royal Hospital four years ago. Copy letters are sent to all patients who accept the offer. This involves additional work and may temper the content of the letter. However anecdotal evidence has suggested patients have appreciated the copies. We have assessed the value of this process. A patient questionnaire with explanatory letter was sent to 135 patients seen in the preceding 3 months in all Gastroenterology clinics by a Consultant or SpR. Responses were anonymised but we were aware of which doctor the patient had seen. 14 questions were asked including questions about the patients understanding of the content, any misinterpretations of what was said, anxiety caused by the letter and overall value of receiving the letter. **Conclusion:** Responses were in favour of receiving a copy. Few patients reported increased anxiety. Overall patients were very appreciative of receiving the correspondence and in many cases the letter helped clarify issues discussed during the consultation.

PALLIATIVE CARE PATIENTS IN THE EMERGENCY MEDICINE UNIT

Atkinson J, Peel T, Chamberlin N, Barton L, Grogan E
Wansbeck General Hospital Ashington and North Tyneside General Hospital

We assessed the reason for admission, preferred place of care and outcome of acute admission for patients known to be at the end of their lives who were receiving palliative care. We evaluated their care against current NICE guidelines. Over 50% self presented. Only 4% were referred by out of hours GPs. Active treatment was the aim of admission in 55%. 77% were treated in their preferred place of care. The Liverpool Care of the Dying Pathway was used in only half of those who died in hospital.

Conclusion: The majority of patients were admitted for active treatment, an appropriate use of acute care beds. Few patients had been asked about preferred place of care however when they were this was usually fulfilled.

LUNG FIBROSIS SECONDARY TO NITROFURANTOIN TREATMENT

Richard Brown, David Beaumont
Queen Elizabeth Hospital, Gateshead

A 77 year old lady presented with a 6 month history of worsening dry cough and breathlessness. She initially responded to oral steroids but then deteriorated and was admitted to hospital with type one respiratory failure. Spirometry revealed a restrictive defect. Chest radiograph showed bilateral lower zone interstitial infiltrates. She received further systemic steroids with improvement. Shortly before the onset of symptoms she had been started on regular nitrofurantoin for recurrent urinary tract infections. This was stopped

following admission to hospital. Six months later her chest X ray is normal and lung function almost normal. **Conclusion:** We must be aware of the risk of lung fibrosis due to nitrofurantoin. Long term antibiotics are often started in hospital for recurrent urinary tract infections. Responsibility for ongoing prescribing falls on the GP who in the event of side effects may be held legally responsible.

IS TIME TO MANUAL ACTIVATION OF IMPLANTABLE LOOP RECORDERS IMPORTANT? A 10-YEAR EXPERIENCE IN A SINGLE CENTER.

M Tynan, AJ Turley, CJ Plummer.

Freeman Hospital, Newcastle upon Tyne

Monitoring with an implantable loop recorder (ILR) is useful in selected patients with unexplained syncope with manual activation providing symptom-rhythm correlation. The new generation ILR has more limited storage capacity (retrospective 390 secs, prospective 60 secs) relying more on automatic activation. There are concerns regarding over or under-sensing leading to memory saturation or failure to record significant events. Over 10 years 564 patients had an ILR inserted. Of these 35 (age 9-86 median 65 yrs) had a pacemaker inserted as a result of arrhythmias detected. The median time to manual activation was 136 seconds (0-488 seconds). Of the 35, 5 had complete heart block, 14 high grade AV block and 16 sinus node disease. Using the new generation ILR (Reveal DX, Medtronic®) 5/35 (14%) would not have had their arrhythmia documented and would have had an unacceptable delay to diagnosis. The median time to activation in these 5 patients was 411secs (390-488sec).

Conclusions: Ten year experience with the ILR confirms its benefit in unexplained pre-syncope/syncope. Manual activation is an important feature. Devices must have sufficient storage capacity to allow for delayed manual activation following an arrhythmia.

CONSIDER HYPOADRENALISM IN PATIENTS WITH FATIGUE AND RHEUMATIC DISEASE

Dimitra Methiniti, Carol Heycock, Jennifer Hamilton, Vadivelu Saravanan and Clive Kelly
Queen Elizabeth Hospital, Gateshead

Random serum cortisol levels are frequently requested by clinicians keen to exclude hypoadrenalism in patients with a variety of presentations. We undertook an audit to assess how frequently this test was of clinical value, and when it was most likely to yield a positive result. Random cortisol was requested by one

medical team in 149 patients over 12 months. 98 patients were medical inpatients, 51 rheumatology outpatients. The commonest reasons for the request were fatigue (32%), low sodium (22%) and unexplained anaemia (21%). The results were low (<200 mcg/dl) in 21 patients (14%), of which the majority had fatigue. Of these, synacthen tests were performed in 16 and were indicative of hypoadrenalism in 6. 3 of these had primary hypoadrenalism, 3 adrenal suppression from oral steroids. All 6 had underlying rheumatic disorders, usually RA (3) or SLE (2).

Conclusions: Primary hypoadrenalism is rare in medical admissions with anaemia, hyponatraemia or fatigue. However, patients with rheumatic disease and unexplained fatigue merit a random cortisol. If low, synacthen testing is mandatory. Steroids should not be commenced empirically in such patients until hypoadrenalism has been excluded as a significant minority will have primary adrenal failure, usually due to autoimmune disease.

SHOULD ALL PNEUMONIA PATIENTS HAVE A CHEST FILM AFTER SIX WEEKS?

Speight RA, Berrill WT., Bari S
West Cumberland Hospital, Whitehaven

BTS guidelines suggest a follow up chest radiograph in patients with pneumonia who have persistent symptoms or who are a high risk of malignancy or over 50. We audited 135 inpatients (mean age 71; 67 male) treated for chest infection with CXR indicating pneumonia. Of 52 patients followed up 26 had complete resolution, 7 partially resolved (1 cancer), 11 no resolution (4 cancer), 8 deteriorated (4 cancer).

Conclusion: 1/3 of unresolved shadows were caused by cancer. This study emphasises the importance of the follow up chest film.

ASSOCIATION BUSINESS

Date of next meeting: Saturday 7th March 2009 at Hexham General Hospital from 10am until 1pm

CME approved. Abstracts for poster or oral presentations from consultants, trainees and medical students are all welcome. Presentations should reflect the full range of clinical medical practice including original research, clinical series, audit and case reports. Please submit by email (around 150 words including a short conclusion) by ---- to clive.kelly@ghnt.nhs.uk. Also e-mail the names of any new consultant colleagues or your own name if you are not on the mailing list.