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Proceedings of the Association of North of England Physicians

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Abstracts of the meeting held on Saturday 11th March 2017 at the Royal Victoria Infirmary, Newcastle

INVESTIGATING THE BRANCHING LEVEL OF THE SUPERFICIAL TEMPORAL ARTERY IN-VIVO USING ULTRASOUND

Varghese Jobin, Jacob Alex, Amandeep Sehra, Ramyar Sigarchy, Marc Rösslein, Karan Sekhon, Neerja Desai, James Coey, Sara Sulaiman
St. George's International School of Medicine, Keith B. Taylor Global Scholars Program, Northumbria University, Department of Anatomy, St. George's University, Grenada, W.I. Department of Applied Sciences, Northumbria University

Knowledge of variations in the Superficial Temporal Artery (STA) is essential for plastic/reconstructive surgical procedures and diagnostic biopsy in giant cell arteritis. Whilst previous cadaveric studies have delineated the branching pattern of the STA, there have been no *in-vivo* ultrasound studies quantifying the relative location of the bifurcation of the STA. This study aims to describe the bifurcation level of the STA in relation to the zygomatic arch (ZA) through the use of ultrasound. 128 STAs from 64 participants, (30 male, 34 female) aged 19 to 41 years, were investigated. Transverse/short-axis ultrasound scans were taken using a GE Logic e ultrasound system with a 12L-RS transducer. The superior border of the zygomatic arch (ZA) was palpated and marked bilaterally. Using ultrasound, the bifurcation of the STA was identified and the distance between the superior border of the ZA and its bifurcation measured with digital callipers. An initial test of inter and intra-operator variability showed no significant difference. The STA was found to bifurcate either; above, at, or below the level of the superior border of the ZA; in 80.5%, 17.2%, and 2.4% of participants respectively. The STA bifurcated 11.9±4.9 mm above, or 7.9±2.6 mm below the superior border of the ZA. The bifurcation level was asymmetrical in 23.4% (15/64) of participants. No statistically significant difference in the bifurcation level of the STA between sexes or body sides was found.
Conclusions: This is the first known ultrasound study to identify and quantify anatomy of the STA in relation to the ZA. Ultrasound is a quick, non-invasive and cost effective means of mapping out vasculature relevant to diagnostic and surgical procedures.

CAN A SHORT TRAINING MODULE IMPROVE NUTRITIONAL KNOWLEDGE OF MALNUTRITION BY JUNIOR DOCTORS?

Harry Musson, Praveen Rajasekhar, Nick Thompson, Chris Mountford, Lisa Gemmell, Barbara Davidson
Freeman Hospital, Newcastle

Hospitalised patients are at increased risk of malnourishment; around 30% of people aged over 65 are at risk of malnutrition on admission. Despite the prevalence and cost of this problem, formal teaching to junior doctors about malnutrition is limited. The aim of this study was to assess whether an online training module could improve knowledge of nutritional management of hospitalised patients. A survey was distributed to FY1 and FY2 doctors working at both Newcastle and Northumbria NHS FTs. 87 doctors participated. The doctors were asked five questions, then given information relating to malnutrition, then answered the five questions again. The survey took approximately 15 minutes to complete. Participants could then download a certificate to show involvement with training. Statistical analysis was performed using a paired t-test to assess the doctors' improvement in answering the questions. Correct answers before training varied from 7 to 36% increasing to 41 to 86% after training.
Conclusions: Knowledge of malnutrition can be improved by completing a short training module

CHEST X-RAY FOLLOW-UP FOR PATIENTS PRESENTING WITH PNEUMONIA AND CXR CHANGES

A Dakak , H Price, L. Chan
Northumbria healthcare NHS foundation trust

Traditionally a follow-up chest radiograph is recommended 4 to 8 weeks after the treatment of pneumonia. The British Thoracic Society recommends chest radiograph is arranged 6 weeks for all patients with persistence of symptoms or physical signs or who are at higher risk of underlying malignancy (smokers and those aged >50 years). The BTS also states that for those admitted to hospital it is the responsibility of the hospital team to arrange the follow-up plan with the patient and the general practitioner. We identified 509 patients with a new consolidation/infective change on their CXR on presentation to hospital. Average age was 74 years. 55.8% female. 382 (75 %) were admitted. Of these 77 (20% average age 80.5 years) died during their admission. The average length of stay was 9 days. 89 patients (17.4%) were not eligible to have a follow-up CXR. Of these 77 died before discharge, 10 were already known to have metastatic cancer, 1 died during follow-up period and 1 lived in a different region. 143 patients of the eligible 420 (34%) received a follow-up CXR. Of the 143 follow-up CXRs that were done, none had new lung malignancy. 2 warranted further investigations. None of the 277 eligible patients who did not have a chest x-ray were diagnosed with lung cancer within a year.
Conclusion: The adherence to BTS recommendation

was poor (34%) and lower than the rate achieved in other studies. The yield from follow-up CXR in diagnosing new lung cancer is very low and similar to that in other studies

IMMUNOSUPPRESSION DOSE ADJUSTMENT USING SHORT MESSAGE SERVICE (SMS). PROOF OF PRINCIPLE FOR RENAL TRANSPLANT RECIPIENTS

Harriet Crook, Claire Brocklehurst, Rauri Clark, James Andrews, Rachel Fraser, Rachael Hogarth, Rachel Davison, Saeed Ahmed, Rachael Forbister, Iain Moore, Alison Brown, Katrin Jones City Hospitals of Sunderland, Freeman Hospital, James Cook University Hospital, Telehealth NHS Sunderland CCG.

Dose changes in transplant patients are typically made by telephone after clinic. The safety of this has not been studied, but potential errors include instructions being misheard or transcribed inaccurately. Voicemail use is generally prohibited due to concern of non-receipt or breach of confidentiality and repeated attempts to make contact may be required. *Florence* is a national computer-based mobile phone text message (SMS) system designed for remote patient interaction. It is free for patients, who are enrolled rapidly following verbal consent with input of their name, NHS & mobile telephone numbers. We developed a template SMS, which includes date, CNI level and new dose. It asks the patient to reply to confirm receipt. If no reply within 24hrs, the team receives an email prompting alternative communication. *Florence* logs all sent & received SMS. In the pilot of 10 patients in the acute post-transplant period, compared with telephone calls, *Florence* halved the minimum time to contact patients from 90 to 45 seconds. In the first 6 months, we have enrolled >250 patients regionally. Informal feedback from patients & clinicians has been positive.
Conclusion: *Florence* meets our objective of making clinic follow-up administration more time efficient and convenient.

SPONTANEOUS PLEURODESIS IN PATIENTS WITH INDWELLING PLEURAL CATHETERS

Ben Teng, Dave Cooper, Avi Ayujayeb
Regional Pleural Service

Indwelling Pleural Catheters (IPCs) are safe and effective in the management of malignant pleural effusions (MPEs). Rates of spontaneous pleurodesis (SP) with an IPC in situ range from 26 % to 76 % depending on the definition of SP and the median time varies from 1 to 3 months. Presence of trapped lung, malignancy type, survival and previous attempt at pleurodesis all affect SP. We defined attainment of SP as the patient needing removal of the IPC for minimal or no drainage. Non-lung cancer patients with IPCs in situ are discharged back to the care of the GPs and some die with their IPCs in situ. Given this is a retrospective review, the above definition was felt to be appropriate. We collected data on type of malignancy, positive cytology, previous chemotherapy and radiotherapy, LENT scoring (pleural LDH, Eastern Oncology Group performance score, neutrophil-to-lymphocyte ratio, tumour type) , presence of trapped lung and infection rates. 19 (28%) underwent SP with median time of 8 weeks. 16 patients who had an insertion of IPC within 8 weeks of first presentation achieved SP (p=0.03). Mesothelioma (9) and lung cancer (6) were the commonest cancers, reflecting our local population. 9 patients each had positive and negative cytology, and 1 instance was unknown. 13 out of 19 had had previous chemotherapy (p=0.03). 17 did not have trapped lung and the LENT score varied from 2 to 8. Only 2 had previous talc pleurodesis and only 2 had trapped lung. There was no infection.
Conclusion: Concurrent cancer treatment and earlier insertion of IPC from diagnosis of MPE may lead to higher SP rates. Further studies are needed to compare SP rates in patients with thoracoscopy and use of talc.

IMPROVED PATHWAY FOR PATIENTS WITH PREVIOUSLY UNDETECTED ATRIAL FIBRILLATION (AF) IN SURGICAL PRE-ADMISSION CLINICS (PAC)

J Mudd, A Hall, A Rice, A Theakston, A Iglesias, J Owen, C Wyatt, AJ Turley, NJ Linker
The James Cook University Hospital

For patients attending a general surgical PAC with previously undetected AF or known AF with rapid ventricular response, significant delays of up to 12 weeks for stroke assessment were identified prior to surgery. This because patients would be referred to their GP to optimise management resulting in unnecessary delay. We developed a streamlined pathway using the cardiac rhythm nurse team who attended PAC when a patient with AF was identified. The patient's stroke risk was managed in accordance with their CHA_2DS_2-VASc risk profile. Ambulatory ECG monitoring, oral anticoagulation (OAC) and rate control medication were initiated when indicated and follow up arranged. Recommendations on fitness for

surgery were made to the PAC, the anaesthetic team and GP. ECG workshops were provided for PAC staff to improve skills in recognising and diagnosing AF. Over 9 months the team were contacted 41 times and managed 11 patients with known AF and rapid ventricular response, 19 patients with previously undetected AF, 17 patients requiring initiation of OAC and 6 patients with known AF not being appropriately anti-coagulated. All patients were seen within 20 minutes of initial contact. Other ECG findings included atrial flutter (2), atrial tachycardia (2), complete heart block (2), sinus rhythm with atrial ectopy (3), and ventricular pre-excitation (2).
Conclusion: Our management system resulted in significant reduction in referral to treatment time with reduction in the number of delayed or cancelled surgical procedures. ECG analysis improved within the surgical PAC team as did communication between general surgery, cardiology and secondary care.

MIGRATORY ARTHROPATHY, FEVERS AND RASH

Agrawal N; Routh C
Northumbria Specialist Emergency Care Hospital

A 60-year-old female of Afro-Caribbean descent with a background of sickle cell trait presented with a 4-day history of sore throat, followed by the sudden appearance of a papulovesicular and pustular rash, large joint arthropathy and fevers. No other infective symptoms or meningism were noted. On the basis of her tachycardia, high-grade pyrexia, and raised inflammatory markers (CRP 235mg/L; WCC 17.6 x 10^9; ESR 101mm/hr), she was treated with empirical broad-spectrum antibiotics while a septic screen was undertaken. She failed to respond. Her ASO titre was not raised. Her infectious mononucleosis screen and blood borne virus screens were negative. She was ANCA antibody negative, with raised C3- 2.04g/L and C4- 0.54g/L. The constellation of her symptoms suggested Sweet's syndrome, a rare acute febrile neutrophilic dermatosis first described in 1964 by Dr Robert Sweet. Skin biopsy showed marked dermal oedema, with neutrophillic infiltrate and no evidence of vasculitis and was consistent with the major diagnostic criteria for Sweet's syndrome. The improvement in her symptoms within days of initiation of systemic oral steroids which is first line treatment for Sweet's syndrome, was dramatic and supports the diagnosis.
Conclusion: The lesson is to increase awareness of Sweet's syndrome and its autoimmune and malignant associations.

ULTRASOUND IDENTIFICATION OF THE ANATOMICAL RELATIONS OF THE TIBIAL NERVE WITHIN THE TARSAL TUNNEL.

Ahmed, Mussanna, Nicole D'Emic, Shish Mohammad , Farzook Fayyaz, James Coey, Sara Sulaiman
St. George's International School of Medicine at Northumbria University, St George's University, Grenada, W.I.
Faculty of Health and Life Sciences, Northumbria University.

Numerous studies have related foot deformities such as pes planus to tibial nerve (TN) stretch and compression in the tarsal tunnel; clinically characterized as Tarsal Tunnel Syndrome (TTS). Establishing a relationship between structures of the tarsal tunnel based on the arch type may explain the increased prevalence of TTS in low arched individuals. This study aims to measure the distance of the TN from the medial malleolus in-vivo using ultrasound and evaluate the effect of arch type on its position. Transverse/short-axis ultrasound scans were taken of the TN at the level of the medial malleolus by a single observer using the GE LOGIQ e ultrasound system with a 12L-RS transducer. The TN was identified bilaterally in 76 ankles of 38 individuals (21 male). Weight bearing and non-weight bearing distance between the TN and medial malleolus was recorded. Weight bearing footprints were obtained and categorized into high, normal or low arch types using an established visual stratification method. The TN showed some degree of positional shift in the tarsal tunnel in weight bearing and non-weight bearing positions between -6.30mm and 7.70mm. The TN was found to be between 17.30-31.80mm (Mean: 23.7±3.5mm) and 13.80-33.90mm (Mean: 23.8±3.7mm) from the medial malleolus when weight bearing or non-weight bearing respectively. There was no statistically significant difference in the TN position with regards to the medial malleolus between sexes, body side or arch type. A high bifurcation of the TN was found in 3/38 participants.
Conclusion: Ultrasound can provide insight into anatomical variations in the tarsal tunnel prior to surgical intervention. Identifying variations based on arch type could yield diagnostic criteria in individuals with TTS.

EDUCATION ON DISCHARGE SUMMARIES AND CODING

C.Gilchrist, L.Pocock, C.Wells, M.Shields, J.Metcalf
University Hospital North Tees

Our Trust has experienced 24 months of higher than expected mortality. Interventions have been

developed to improve these figures and the Hospital Standardised Mortality Rate (HSMR) is now within expected ranges, with a value of 106.07. The Trust's catchment area includes several of the most deprived areas in Northern Europe. However, the reported co-morbidity level is the lowest in the North East, with the 18th lowest average nco-morbidities in the country. Documentation of co-morbidities has been demonstrated to be poor through external audit and this educational intervention aims to improve this. An interactive, Foundation doctor led teaching session was developed for Foundation year 1 doctors. Topics included the utilisation, both clinical and economic, of discharge summaries and basic coding. A real anonymised case was used to practice improved documentation, with input from a GP, Consultant Physician and Clinical Coder. Evaluation included pre and post teaching scaled self-assessment questionnaires and changes in co-morbidity coding were examined for 2 weeks before and after intervention. 86.4 % of learners reported improvement in understanding of utility of discharge summaries. Understanding of coding increased on average from 1.59 to 2.59. All attendees committed to changing their documentation practice. Average co-morbidity coding increased from 4.41 to 4.63.
Conclusion: A structured teaching session improved understanding of discharge summaries and coding and a commitment to improve documentation which in turn could improve communication with patients and GPs and impact on clinical performance data.

PLEUROPARENCHYMAL FIBROELASTOSIS: A "NEW" INTERSTITIAL LUNG DISEASE

V. Chew, A. Pearson, S. Worthy, A. Beattie, J. Simpson, I. Forrest
Royal Victoria Infirmary, Newcastle

Pleuroparenchymal fibroelastosis is an increasingly recognised cause of upper lobe fibrosis. It is characterised by upper lobe pleural and subjacent intra-alveolar fibrosis with accompanying alveolar wall elastosis. We present 4 cases. Case 1: 14-year-old male presented with non-resolving cough with a past history of dyskeratosis congenita (DC). DC is a recognised cause of PPFE and the patient had 1 episode of pneumothorax. Case 2: 80-year-old female presented with 6 months history of progressive breathlessness and a dry cough. Chest x ray confirmed upper zone fibrosis and computer tomography (CT) of thorax was consistent with PPFE. Her symptoms remained stable 3 months from diagnosis. Case 3: 51-year-old female presented with progressive breathlessness and desaturated when walked into clinic. CT thorax demonstrated changes consistent with PPFE. Her disease was progressive though partly steroid responsive. Case 4: 79-year-old male presented with weight loss and new right upper zone shadowing. CT thorax showed asymmetrical upper zone fibrosis consistent with PPFE. His disease was slowly progressive and he died 5 years from diagnosis.
Conclusion: All 4 cases demonstrate radiological changes consistent with PPFE. Though no biopsy was performed, Reddy et al. report good correlation between radiological findings and histology. We would like to introduce PPFE as a new differential diagnosis of upper lobe fibrosis. PPFE may be idiopathic but is often associated with other conditions.

A RARE CASE OF SYSTEMIC INFLAMMATORY DISEASE

A.Craik, A.Hassan, P.Mead
North Cumbria University Hospital

A 65 year-old man presented with a one-year history of episodic fever, symmetrical inflammatory arthritis and erythematous, non-tender papules on his extremities and abdomen. Episodes occurred every 6 to 8 weeks, lasted 3 days and resolved spontaneously. Skin biopsy showed a leucocytoclastic vasculitis. Further vasculitis screening was negative and investigations did not reveal any evidence of infection, malignancy or connective tissue disease. He was initially managed as an ANCA-negative vasculitis and responded to high-dose prednisolone. He failed to respond to trials of methotrexate, mycophenolate, cyclophosphamide, tocilizumab or rituximab. A diagnosis of an auto-inflammatory condition was considered and genetic testing revealed evidence of Tumour Necrosis Factor Receptor Associated Periodic Syndrome (TRAPS). He was commenced on Anakinra with good effect.
Conclusion: TRAPS is one of the recognized hereditary recurrent fever syndromes; a group which includes the more prevalent Familial Mediterranean Fever. It has a prevalence of around one per million. There can be considerable variation in the disease presentation. The predominant features are fever, diffuse limb pain, abdominal pain, rash and eye manifestations.

DIABETES REMISSION CLINICAL TRIAL (DIRECT): BASELINE DATA

SV Zhyzhneuskaya, Al-Mrabeh, C Peters, A Barnes, KG Hollingsworth, H Pilkington, M Lean, R Taylor
Newcastle University, Glasgow University

DiRECT is a randomised controlled trial to determine the feasibility of the long-term remission of early Type 2 Diabetes in NHS primary care. Newcastle research has previously shown that 15 kg weight loss can reverse type 2 Diabetes. The important questions now concern the practicality of the intervention and durability of restoration of normal health. We report the baseline clinical and metabolic characteristics of the cohort. Of 1521 people invited, 423 (28%) accepted, 306 were eligible at screening, and gave informed consent. The Tyneside cohort were of weight 99.7±16.3kg; BMI 34.5±4.3kg/m^2; 52.8±7.9y; 58% male; diabetes duration 2.9±1.6y. Fasting plasma glucose was 8.5±2.6mmol/l with fasting plasma insulin 93±57pmol/l. Mean liver fat content was grossly elevated at 14.8±9.6% (upper level of normal 5.5%). The production rate and pool size of VLDL1 triglyceride were 547±178mg/kg/day and 2372±1751mg respectively. Liver fat positively correlated with both VLDL1-triglyceride production rate (R=0.43, p<0.0001) and pool size (R=0.31, p=0.003). It also correlated positively with fasting plasma glucose (R=0.35, p=0.001) and fasting plasma insulin (R=0.52, p<0.0001). **Conclusion:** The intervention was attractive to many people with type 2 diabetes. The extent of the liver fat abnormality, with implications for both ectopic fat accumulation and cardiovascular disease, is far greater than that of plasma markers of type 2 diabetes, including fasting plasma glucose or insulin. Hepatic steatosis requires to be recognised as the major metabolic disturbance of early type 2 diabetes.

IS VITAMIN D DEFICIENCY WORTH IDENTIFYING IN ELDERLY MEDICAL INPATIENTS?

Eyre-Brooke S, Lambson R and Kelly CA.
Gateshead Health NHS Foundation Trust

Vitamin D deficiency is known to be common in the North East, and to be associated with muscle weakness and falls. 30% of medical admissions in patients over 65 had a primary complaint of weakness, falls or poor mobility. We identified all patients admitted to one medical ward aged 65 and over for a period of three months. We attempted to estimate the vitamin D levels in all such patients but found that this policy took time to introduce. We followed up length of stay, readmission and mortality over a further 3 months in all patients in whom we succeeded in measuring Vitamin D. Initially we measured levels in only 22% of admissions aged over 65 (month 1) but this improved to 71% by month 3. Overall, almost half of the patients who had their vitamin D levels measured were found to be deficient (29/60). Length of stay was significantly prolonged in patients with vitamin D deficiency (mean 8.3 days) when compared to patients with higher levels (mean 6.6 days) p=0.03. Although we were unable to demonstrate any significant difference in readmission rates over three months in this small study, there was a significant increase in 3 month mortality among vitamin D deficient patients (9/29 deaths) when compared to those with higher levels of the vitamin (5/31) p=0.046.
CONCLUSIONS: Vitamin D deficiency is common among the hospitalised elderly and may be associated with an increased length of stay and increased subsequent mortality. We need to know the effect of replacing vitamin D on length of stay and mortality in this population.

AUDIT OF TRANSNASAL NASOJEJUNAL TUBE INSERTION SERVICE

Sara Koo, Simon Panter, Faheem Butt
South Tyneside District Hospital

Nasojejunal tube (NJT) is inserted endoscopically or radiologically. Traditional endoscopic insertion is via oral route requiring mouth to nose transfer, and is unpleasant. Transnasal endoscopy is an emerging technique performed with an ultrathin endoscope inserted via nasal passages which circumvents mouth to nose transfer of NJT and requires less sedation. We reviewed data retrospectively, only including transnasal NJT insertion, excluding endoscopically assisted feeding tube insertion and endoscopic oral NJT insertion. 38 cases involving 25 patients were included (age 22-81, M:16, F:9). Most common indications were pancreatitis, gastroparesis, and malignancy. Topical anaesthesia was used in 17, topical anaesthesia and sedation in 17, sedation only in 3 and no sedation in 1. The mean midazolam dose

was 2mg. Post pyloric NJT insertion was shown to have been achieved in 26 patients (68.4%), gastric placement only in 29%. Success rate yearly :2013/14: 50%; 2015: 67%, 2016: 76%. Success rate based on indication: Pancreatitis 92%, malignancy 71.4%, gastroparesis 45%.
Conclusion: Our audit suggests that our current practice is satisfactory. Our post pyloric insertion is improving yearly. Our standards for successful NJT insertion may be unrealistic due to varied indication of post pyloric feeding in our cohort.

CRANIAL NERVE PALSY IN GIANT CELL ARTERITIS (GCA)

Jonathan Hacking and Clive Kelly
Queen Elizabeth Hospital, Gateshead

A 78 year old man was referred to the Rheumatology team by his GP having presented with acute monocular blindness. On slit lamp examination, he was found to have features consistent with anterior ischaemic optic retinopathy. His ESR was 95. He had suffered a previous stroke that left him with expressive dysphasia, but we confirmed that he had recent onset of headache and had no prior visual symptoms. On examination there was complete monocular blindness to light/dark in the left eye with temporal artery tenderness. There was a relative afferent pupillary defect in the left eye and a pupil sparing left oculomotor nerve palsy. Treatment was initiated with high dose I-V methylprednisolone. He was discharged on 80mg oral prednisolone and reviewed one week later, when headache and cranial nerve abnormalities had resolved, though monocular blindness remained. Two previous patients with classic GCA had recently presented with acute onset deafness, remitting within a week of high dose steroids, prompting our interest in cranial nerve involvement in GCA.
Conclusion: Acute cranial nerve palsy in a patient with a high ESR and headache should prompt consideration of GCA and trigger initiation of steroid therapy.

IMPLANTABLE CARDIAC DEFIBRILLATORS: END OF LIFE CONSIDERATIONS

H Billett, C Wilkinson, H Thomas

More patients are having an ICD implanted and subsequently more will die with a device in place. In situations where it is clear a patient is deteriorating and other treatments are being withdrawn, addressing an active ICD is an important part of their on-going care. Deactivating an ICD at the appropriate time can prevent painful shocks that will be distressing for patients and their loved ones. We describe two cases who were suffering with chronic illness and who had an episode of acute deterioration in hospital. As decisions were being made about resuscitation status and the appropriateness of ongoing active treatments their ICD's were not considered. Opportunities were missed to do this by different specialists including cardiologists, intensivists, general physicians and palliative care specialists. These oversights could have impacted on their ability to have a peaceful and dignified death.
Conclusion: Our cases highlight the need for awareness and improved communication and clear documentation regarding decisions about ICDs in deteriorating patients. We suggest including prompts to consider ICD status in treatment escalation such as the UK Resuscitations councils 'ReSPECT' (Recommended Summary Plan for Emergency Care and Treatment) document.

RATE AND DURATION OF HOSPITAL ADMISSIONS IN MID- TO LATE-STAGE PARKINSON'S DISEASE IN NORTH-EAST ENGLAND

RW Walker, J Ziegler, M Agarwal, D Oh, L Trendall, C McDonald, WK Gray, L Oates and A Hand
North Tyneside General Hospital, Newcastle University,

People with Parkinson's disease (PD) are admitted to hospital more often that the general population. However, there are few recent data on rates of hospitalisation in late stage disease. We detailed all unplanned admissions of people with PD. All people with late stage (Hoehn and Yahr III-V) idiopathic PD, PD dementia, or atypical parkinsonian syndromes under the care of the Northumbria Healthcare NHS Foundation Trust PD service on 1st January 2015 were identified. Demographic, disease characteristics and all hospital admissions from 1st January to 2014 to 31st December 2016 were recorded. 377 met the inclusion criteria. The mean age was 77.5 years and there were 212 (56.2%) males. There were 659 admissions in the three year study period; 249 (66.0%) subjects were admitted at least once and the maximum number of admissions was 14. The total number of occupied bed days was 9024 (3008 occupied bed days/year; mean 13.7 days) in those admitted. The risk of someone in care home being admitted was 1.3 that of someone living at home with odds of at least one admission 1.7 (95% CI 1.0 to 2.9). The effect was attenuated by adjusting for Hoehn and Yahr stage and became non-significant with odds ratio 1.5 (95 CI 0.8 to 2.7).

Conclusions: Rates of admission were high in late stage PD. Efforts to avoid hospitalisation, could yield cost savings, improve patient's quality of life and reduce pressure on services.

Invited Lecture.

Professor Richard Walker, North Tyneside General Hospital

EXPERIENCES OF WORKING IN SUB-SAHARAN AFRICA

I first worked in Sub-Saharan Africa (SSA) in the Gambia in the early 1990s. I was surprised to find a lot of young stroke patients and carried out my MD on a case-control study of patients with stroke admitted to the Royal Victoria Hospital, Banjul. We recruited many more men than women and noted their poor 3 year outcome. I then undertook research in Demographic Surveillance Sites (DSS) in Tanzania. By means of verbal autopsy over a 3 year period, we demonstrated higher age-adjusted/ mortality rates than England and Wales in both men and women. I also conducted a stroke prevalence study informed by a door-to-door survey in which we demonstrated the age-adjusted stroke prevalence in those who still had a deficit was slightly lower than previously shown in developed countries. Following this, we undertook the Tanzanian Stroke Incidence Study in the Hai District and Dar es Salaam DSS over a 3 year period and demonstrated incidence rates as high, or higher than, African-Americans living in Northern Manhattan, New York, who already have higher rates than Caucasians. The main identifiable risk factor is hypertension which is often not diagnosed and if diagnosed not treated and if treated not controlled. We showed via anonymous testing that HIV was a significant risk factor for stroke in this population. In further work, we investigated the prevalence of Parkinson's Disease (PD) via a door-to-door survey and showed lower rates than in developed countries but higher rates than previously demonstrated in SSA. Only a fifth had previously been diagnosed. The reason for the low prevalence rates may relate to early mortality due to lack of diagnosis and treatment. From our figures, we estimate that half the people in the world with PD have not been diagnosed. We are looking at initiatives via the African Task Force of the Movement Disorders Society to raise awareness, educate health professionals and identify ways of providing affordable and sustainable drug treatment in the future.

Association Business

Date of next meeting: Wednesday 5th July 2017 6.00 pm Freeman Hospital.

This will be the first of the new meetings taking place after the GIM teaching. The format will remain unchanged with 9 slots for oral abstracts and 6 for poster presentations. There will be a free buffet meal served half way through the meeting to allow posters to be inspected and concentration to be maintained! Please do come and encourage your juniors to come/stay after the GIM teaching.

The meeting is **approved for 3 hours CME.** 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 research, clinical series, audit and case reports. Please submit by email (around 250 words including a short conclusion) **before17th May** to the secretary clive.kelly@ghnt.nhs.uk.

The Margaret Dewar prize for the best junior doctor or medical student's presentation will be awarded for the best oral presentation of the year (£150), runner-up (£100) and best poster (£50).

Had you considered joining the committee? Our meetings with refreshments take place 3 times a year. We are particularly seeking enthusiastic representatives from James Cook, Northumbria and Carlisle. If interested, please contact Clive Kelly clive.kelly@ghnt.nhs.uk.

Also please e-mail the names of any new consultant colleagues or your own name if you are not already on the mailing list to the secretary and consider presenting your research for the Hewan Dewar prize awarded annually for the best research paper submitted by a junior doctor or medical student.

We look forward to seeing you at the Freeman Postgraduate Centre on Wednesday 5th July

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