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Proceedings of the Association of North of England Physicians

A specialist registrar-led mentorship scheme for foundation doctors will be well placed to address current needs of foundation doctors. We found specialist registrars from different specialties were willing to support foundation doctors.

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Abstracts of the meeting held on Wednesday 7th November 2018
Freeman Hospital

DOES A DAILY CONSULTANT REVIEW EFFECT LENGTH OF STAY OR THE PATIENT'S PERCEPTION OF CARE?

Caitlyn Brown, Lauren McAnallen, Clive Kelly
Gateshead Hospital NHS Trust & University of Newcastle School of medicine

Using a prospective audit in January 2018 we assessed the impact of a daily consultant review (DCR) on patient perception of care, length of stay (LoS), accuracy of expected date of discharge (EDD) and proportion of bed days lost to delayed discharges. 32 patients from a dedicated winter pressure ward (WPW), where there was a daily consultant ward round, were compared to 28 boarded patients (BP). Patients on the WPW had half the LoS (WPW=7.7days, PB=14.1days) and the EDD was more accurate with an average difference of +0.96 (WPW) compared to +2.5 (PB). DCR reduced bed days lost almost 3-fold (DCR=26.9%, BP=79.8%), with 70.9% days lost attributable to awaiting social input. WPW patients scored higher in patient understanding of conditions (90.6% *v* 50%), understanding of management plans (96.8% *v* 53.6%) and diagnosis (96.8% *v* 70.4%).
Conclusion: Our study suggests that a daily consultant review as occurs on our winter pressure ward improves the outcome for the patient.

CURRENT STATUS OF FERTILITY AND FATHERHOOD IN MEN WITH CYSTIC FIBROSIS (CF)

J Briggs, A Anderson, S Doe, C Echevarria, M Choudhary, K McEleny, J Stewart, SJ Bourke
Cystic Fibrosis Centre and Fertility Centre Newcastle upon Tyne Hospitals Trust

Men with CF are infertile due to congenital absence of the vas deferens but can undergo assisted reproduction with sperm retrieval and in-vitro fertilisation. Ill health and concerns about prognosis may impair relationships and influence reproductive choices. We studied 205 men (mean age 30.9, range 16.6 to 64.3 years) over a 10 year period to provide data on fertility and fatherhood in CF. The men had a range of disease severity with a mean FEV_1 of 2.69 (0.35-5.9) L and body mass index of 22.5 (13.8-36.2) kg/m^2. 102 (49.5%) were single, 52 (25.7%) were married, 48 (23.3%) were in long-term heterosexual relationships, and 3 (1.45%) were in same-sex relationships. One (0.5%) was fertile naturally. In total 30 children were born to 23 (11%) men by assisted reproduction: 4 used donor sperm and 19 had sperm retrieval and intracytoplasmic sperm injection. Two men had 4 adopted children, and 15 (7.3%) men were acting as step-fathers to 20 children from their partners' previous relationships. Overall 41 (20%) men had fatherhood roles. IVF was unsuccessful in 4 men. A further 16 men were referred for fertility treatment but did not proceed: in 5 of these cases their relationship ended; 2 of the women are carriers of CF and are considering pre-implantation diagnosis. Of the 19 men having children by IVF, 3 died leaving 4 children.
Conclusion: Men with CF face complex decisions when considering their relationships, fertility and fatherhood. As the prognosis improves fatherhood is increasingly common and an important life achievement for them.

RE-THINKING PATIENT REFERRALS: FINDINGS FROM A GP TO ACUTE MEDICINE REFERRAL AUDIT

December Ikah*; Mohammed Abdelgader; Ayo Oliyide; Allan Anthony; Mark Carson
Darlington Memorial Hospital

In 2017, in order to enhance the quality of GP referrals, NHS England issued a national directive requiring all referrals to be peer reviewed before referring to secondary care. The aim of this study was to look at GP communication with acute medicine physicians and improve patient safety. We used an established clinical communication tool known as SBAR (situation, background, assessment, and recommendation) to explore the content of GP referral letters. Using this tool we analysed fifty GP referral letters sent to our Acute Medicine Unit. We combined thematic analysis and expert review of our data and found that the SBAR tool by itself was inadequate in communicating referral process information. In order to explain referral quality, we developed a new conceptual framework which we called Problem, Concern and Thinking (PCT). Using this framework, we found over 60% of GP referrals were of inadequate quality.
Conclusion: The PCT framework could find application not only in GP to secondary care referrals, but in all patient referrals.

HOME IMPROVEMENTS…IT'S ALL IN THE HISTORY

H.Mainman, I.Forrest, J.Macfarlane
Royal Victoria Infirmary

This 63-year-old lady was admitted with haemoptysis. Her admission CT revealed bilateral ground glass infiltrates but no evidence of a bleeding vessel.

Following admission she sustained a further large volume haemoptysis, desaturated to 64% and arrested. Haemoptysis had caused airway obstruction leading to respiratory arrest. Following 2 cycles of CPR and 1 dose of adrenaline spontaneous circulation returned. She was intubated. Bronchoscopy showed clots but no bleeding vessels. She was treated empirically with methylprednisolone and broad spectrum antibiotics. She improved and was extubated. Her investigations for vasculitis and infection were negative and it was not until a thorough history was taken that the potential cause of haemoptysis was revealed. In the week preceding admission she had been using Polycell maximum paint stripper which contains N butyl acetate and cyclohexanone on her stairwell. She remembers feeling ill around the time of using this. It is believed that the this could have been the chemical trigger for her haemoptysis.
Conclusion: The case emphasises the importance of a thorough history and the easy availability of potentially dangerous products.

IDENTIFYING LATE LIFE DEPRESSION IN A SUB-SAHARAN SETTING

Howarth-Maddison M, Walker R, Paddick SM.
Northumbria healthcare NHS Trust

We aimed to develop a brief, culturally appropriate screening tool for identifying late life depression (LLD) for use by non-specialist clinicians in primary and outpatient settings in sub-Saharan Africa (SSA). A random sample of older people attending general medical clinics was interviewed using a 30-item questionnaire developed using a Delphi consensus method. This was validated against blinded assessment by a research doctor using the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-5) depression criteria. Factor and item analysis were then used to remove redundant items. Using these tools we found a depression prevalence (N=96) of 10.4% (95%CI=4.3%-16.5%). The Maddison Old-age Scale for Identifying Depression (MOSHI-D), a 12-item screening tool was developed. It had good internal consistency (Cronbach's α=.820) and construct validity (AUROC=.880, original 30-item AUROC=.810).
Conclusion: This study informed the design of a culturally appropriate screening method for identifying LLD within SSA. It demonstrates retrospective construct validity and should be easy for non-specialists to understand. It is relevant to gold-standard DSM-5 criteria and cultural manifestations of depression symptomology. Prospective validation and development of a scoring scale will provide an LLD screen to improve mental healthcare integration into primary and chronic health settings within SSA in accordance with WHO strategies, and could improve patient access to care.

AN INTERESTING CASE OF MYOSITIS

Ashutosh Kapoor,
Queen Elizabeth Hospital, Gateshead

A 74 year-old gentleman with a background history of ischaemic heart disease and hypertension, presented to the emergency department feeling generally unwell with decreased mobility and proximal muscle weakness over the past 3 months. He was unable to walk upstairs and had to lift up his legs with his hands to get out of the car. He had no fever, chills, weight loss, anorexia, joint pain, dysphagia, Raynaud's phenomenon, skin rash or temperature intolerance. Medications on admission were amlodipine, ramipril, atorvastatin. Autoantibodies were negative. Nerve conduction studies suggested an inflammatory myositis. Muscle biopsy on vastus lateralis muscle showed a myopathic process with necrosis and regeneration compatible with a statin origin. Muscle damage by statins is most often due to its direct toxic effects, possibly via coenzyme Q10 depletion causing mitochondrial dysfunction. The injury is dose dependent and reversible after withdrawing the drug, with most recovery of symptoms occurring within 2–3 months.
Conclusion: Statin induced myositis should always be high on the differential diagnosis of muscle weakness in patients receiving statin medication.

TRAINEE-LED MENTORSHIP SCHEME FOR FOUNDATION DOCTORS: TRAINEES' PERSPECTIVE AND VIEWS

Owain Leng, Stella Collins, Ali Aldibbiat
James Cook University Hospital

We evaluated Foundation Doctors' (FD) reception of an Specialty Registrars' (StR) mentorship program as well as the StRs' willingness, availability and views on delivering such a scheme. Foundation doctors and StRs were issued with a survey in either paper or electronic format or by use of the online platform SurveyMonkey. School. Training program approval was obtained. There were 56 responses from FDs. Results showed 77% would choose to have an optional registrar mentor and demonstrated that in several areas FDs would feel more comfortable seeking advice from a registrar rather than their consultant supervisors. There were 216 responses from StRs.

Respondents were from Medicine, Emergency Medicine, Psychiatry, Surgery, General Practice, Paediatrics and Obstetrics/Gynaecology. 81% of StRs would have valued a registrar mentor during their foundation years. 79% would be willing to mentor one or more FDs, and 89% would be willing to partake in training on providing mentorship. More than 80% of StRs were happy to discuss a broad range of topics with a mentee as part of the proposed mentorship scheme such a career choice, personal difficulties, work/life balance and career development. Only 10% of registrars felt they would be unable to regularly meet FDs as part of a mentorship scheme. A common theme in the free text responses was a desire to support junior colleagues in the current NHS climate "I feel it is important to support junior colleagues particularly with the current increased levels of stress and activity in today's NHS".

Conclusion: An StR-led mentorship scheme for FDs will be well placed to address current needs of FDs. StRs from different specialties are willing to support FDs. Adoption by Health Education North East will be required to enable success of such a scheme.

PNEUMOCYSTIS JIROVECII OUTBREAK AFFECTING A SINGLE NEPHROLOGY CLINIC

Clive Graham, Paul Mead, Leila Izadi Firouzabadi and Suryabrata Banerjee.
West Cumberland Hospital

Pneumocystis jirovecii is a human-specific ascomycetous fungal organism discovered in 1909 and named after the Czech parasitologist Otto Jirovec, who described pneumocystis pneumonia in humans in 1952. Any immunocompromised condition is a risk factor for pneumocystis jirovecii pneumonia(PJP). Common predisposing factors include frequent interpersonal contact, lack of isolation, and lack of chemoprophylaxis. In renal transplant recipients (RTRs), the incidence of PJP is 5–15% in patients without prophylaxis, with a greater relative risk up to 6 months post-transplant. Mortality rates are 13–38% in this population. We present a case series of four patients with an age range of between 47 to 75 years old in a nephrology clinic with an eventual diagnosis of PJP and document the management of the outbreak through a multidisciplinary team approach. Of these four patients, three had a history of kidney transplantation in the past and the other was immunosuppressed for ANCA +ve vasculitis. A group of professionals including renal physicians, respiratory physicians, multiple microbiologists and the infection control team were involved. The diagnosis of all patients was confirmed by bronchoalveolar lavage (BAL). Patients were treated with trimethoprim/sulfamethoxazole (TMP-SMX). 3 required ITU support. Unfortunately, one patient died. For a six month period TMP-SMX prophylaxis was commenced for all at risk patient groups to minimize further transmission and masks were provided to patients when attending the outpatient department. No further cases presented during this six month period or subsequently.

Conclusion: This report demonstrates the importance of a multidisciplinary approach to infectious disease outbreaks and the effectiveness of barrier as well as drug prophylaxis

POTENTIAL USE OF SGLT2 INHIBITORS IN HIGH RISK ACUTE CORONARY SYNDROME (ACS) PATIENTS

A Gupta, J McMinn, M Hammond, AJ Turley
The James Cook University Hospital, Middlesbrough

Patients with type 2 diabetes (T2DM) are at significantly increased risk of cardiovascular events and those with previous events are at highest risk of death or heart failure. Sodium-Glucose Co-transporter 2 (SGLT2) inhibitors act to reduce reabsorption of glucose into the bloodstream. The Empagliflozin, Cardiovascular Outcomes, and Mortality in Type 2 Diabetes (EMPA-REG) Outcome trial demonstrated a significant reduction in primary composite cardiovascular outcomes of 1.6% in patients prescribed empagliflozin in addition to standard treatment and a 2.6% reduction in all-cause mortality. In the UK, T2DM patients are not routinely under secondary care follow-up. As such there may be a significant proportion of patients at high cardiovascular risk who would potentially benefit from SGLT2 inhibitors. Data was retrospectively collected from the Myocardial Infarction National Audit Project (MINAP) database over the calendar year 2016-17 at a tertiary cardiothoracic centre. T2DM patients were identified and criteria of inclusion were matched against the EMPA-REG OUTCOME study inclusion criteria. 1535 patients (mean age 67±12.5yrs) were admitted with an ACS in 2016-2017. 312 patients (20%) were diabetic (mean age 69±11.4yrs). Of these, 53 patients died within one year of ACS event (1-year mortality rate 16.9% vs 7.6% for non-diabetics). As per EMPA-REG inclusion criteria, patients with eGFR >30 mL/min/1.73m^2 (253 patients) and HbA1c 7-10% were identified. This resulted in a total of 136/312 (44%) patients from the year 2016-2017 who would qualify for an SGLT2 inhibitor according to EMPA-REG criteria. Only 6 of these patients were currently prescribed a gliflozin. Based on EMPA-REG trial evidence of NNT 39 to save one life with empagliflozin, we could

potentially save approximately 4 lives per year in this high-risk population.
Conclusion: Incorporating consideration of an SGLT2 inhibitor into our current local cardiology protocols as a routine part of secondary prevention for patients with T2DM admitted with ACS could potentially have a significant impact on both mortality and subsequent heart failure hospitalisations for this group of high risk patients.

A RETROSPECTIVE ANALYSIS OF EFFICACY OF INTRAVENOUS IRON INFUSION FOR PATIENTS WITH INFLAMMATORY BOWEL DISEASE

Danielle Rayner, Ravi Ranjan, Anjan Dhar
County Durham & Darlington NHS Foundation Trust

Iron Deficiency Anaemia (IDA) is a common association of Inflammatory Bowel Disease (IBD). Mechanisms include blood loss, systemic inflammation and malabsorption. Retrospective case notes and pathology were reviewed for all patients who received IV iron as ferric carboxymaltose (Ferrinject®) for IDA on the Medical Day Unit between March and August 2017. 24 out of 78 patients who received an iron infusion had IBD. Of these, 9 had active disease, 16 were intolerant of oral iron, 4 had no response to oral iron and 5 had no documented indication. Mean haemoglobin level prior to infusion was 102.79g/L (range 49–142). 19 patients required 2 infusions to receive their calculated therapeutic dose. Post infusion, 62.5% patients achieved target Hb (>120g/L).
Conclusion: IV Iron replacement is an effective therapy with good response in patients for whom oral iron is not appropriate. Some patients require multiple infusions to receive a therapeutic dose.

FEASIBILITY OF USING AN APPLICATION-BASED TOOL TO SCREEN FOR DEMENTIA IN THE HAI DISTRICT OF TANZANIA

R Barber, A Colgan, R Walker, SM Paddick, C Dotchin, WK Grey, J Rogathi, J Kisima.
Northumbria Healthcare, North Tyneside Hospital.

Our aim was to establish the feasibility of using a smart-device application (app) to screen for dementia in older adults in the Hai district, Tanzania. Rural primary healthcare workers screened consenting adults aged ≥60 with an app to screen for cognitive and functional assessments, previously validated as pen-and-paper tests. Stratified samples underwent additional, blinded assessments for dementia, and scores were compared to determine the construct validity of the screen. Likert-style questionnaires were used to determine the acceptability of smartphone-based screening to participants, and those administering the tests.407 people were screened in 2 villages (96.2% of those ≥60); 84 of these were seen in second stage assessments. Poor screening scores significantly correlated with informant-reported poor functioning ($r=0.609$, $p<0.001$), and a provisional diagnosis of dementia or mild cognitive impairment (MCI) ($r=-0.348$, $p=0.001$). Response rates for acceptability questionnaires were 100% and 81% for assessors and participants respectively. 11/12 assessors and 63/68 participants preferred use of the app to paper assessments. All testers said the app would be useful for future work.
Conclusions: Using an app to screen for dementia in a rural Tanzanian population is feasible; the app was acceptable and preferred to the equivalent pen-and-paper test. Construct validity tests showed that the screen could detect dementia and mild cognitive impairment.

TELEMEDICINE BASED SMOKING CESSATION SUPPORT IN SECONDARY CARE

Conroy K, Allcock R, Smart J, Hart S.
Queen Elizabeth Hospital Gateshead

Current smokers admitted to secondary care often express a wish to stop smoking. We observed an unmet need for support for smokers admitted to secondary care. Telemedicine methods may provide a cost-effective way to support smoking cessation. We devised a text-message based service to provide support after discharge to in-patients wishing to stop smoking. We recorded the number of patients approached for enrolment, their response, the number of patients who completed 82 days of the programme, and their smoking status at the end of the study period. The primary outcome was the number of patients who replied 'YES' to the consent text message. Forty patients were identified and approached; twenty five consented to participate in the project. Ten patients replied to the initial consent text message and were enrolled in the project. At 82 days three patients (12%) replied to report continued smoking status. No patients were successful in their cessation attempt this time.
Conclusion: Our primary outcome was reached in 40% of patients who gave verbal consent to take part. 62.5% of the patients stated that they wished to quit smoking. Unlike other telemedicine studies which rely

on self-referral, our participants were approached by us for recruitment; they reported a desire to stop smoking but may not otherwise have chosen this time to try. Telemedicine may have a role in an integrated smoking cessation service. These results are informing the next stage in our development of a smoking cessation support system.

Association Business

Date of next meeting: Wednesday 27th March 2019 6.00 pm Freeman Hospital.

This takes place after the GIM teaching at the Postgraduate centre Freeman Hospital. There will be refreshments before and 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) to the secretary Colin Doig (colin.doig@northumbria-healthcare.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).

Why not enter your research for the Hewan Dewar prize (£500) awarded annually for the best research paper submitted by a junior doctor or medical student. Details available from the secretary.

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 Colin Doig (colin.doig@northumbria-healthcare.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.

We look forward to seeing you at the Freeman Postgraduate Centre on Wednesday 27th March 11th July