... The recurrence rate [of clostridium difficile infection] is around 10%, and mortality continues to be high (approx. 30%) within a three month period after diagnosis...

... Myocardial perfusion scanning (MPS) misses significant lesions, particularly in patients with balanced ischaemia. Patients with multi-vessel disease who have the most to benefit from re-vascularisation could have a negative MPS...

... incidence of oesophageal cancer was 0.39% per year in patients with Barrett’s oesophagus. Screening endoscopy did not have significant impact on patient survival.....

... Stroke-like episodes can be the first manifestation of mitochondrial disease and effective seizure management is essential in preserving cerebral function and minimizing disability....

Abstracts of the meeting held on Saturday 7th March 2015 at Queen Elizabeth Hospital, Gateshead
CLOSTRIDIUM DIFFICILE INFECTION – AN APPRAISAL OF CLINICAL PRACTICE AND OUTCOME IN COUNTY DURHAM IN 2015
R Kirkley, S Brown, D Nayar, A Dhar
Departments of Gastroenterology and Medical Microbiology, County Durham & Darlington NHS Trust

A retrospective review of 77 patients from April 2012 to October 2013 was carried out to report on the clinical epidemiology of hospital and community clostridium difficile infection (CDI) and the severity and course of the disease and clinical outcomes. 75% of patients with CDI were diagnosed in the hospital and 25% in the community. 27% had severe CDI according to the DoH criteria. 75% of patients were aged 75 years or more. 30% pts were receiving laxatives and 57% were receiving PPIs at the time of diagnosis of CDI. In 50% of patients, the PPI was stopped. 81% pts received the appropriate treatment for their CDI as stratified by the Department of Health algorithm. All but 8% pts were treated, and 39/71 pts responded to initial treatment. Of 32 pts who did not respond to initial treatment, escalation of treatment was carried out in all but 5 (all of whom died). Most patients were treated with either metronidazole or vancomycin, with 29 patients receiving a second line agent, 3 patients received IV immunoglobulin. Recurrence of CDI was seen in 9%, 3 patients within 28 days and 4 after 28 days. 39% of patients with CDI died within 3 months of their diagnosis, 70% of deaths occurring in hospital. Conclusions: This review has shown that 81% of our patients received appropriate initial treatment, in line with national guidance. 82% also had non CDI antibiotics stopped at the time of diagnosis. The recurrence rate is around 10%, and mortality continues to be high (approx.30%) within a three month period after diagnosis.

DIABETIC GASTROPARESIS. A REVIEW OF CLINICAL PRACTICE IN COUNTY DURHAM
Ali Aldibbiat, Emma Nash, Catriona Sinclair, Praveen Partha, Paul Peter, Anjan Dhar
County Durham and Darlington NHS Trust

40 pts were identified from the diabetes database. 7 were excluded; 5 having moved 1 not consenting and 1 died. Median age 48 yrs (21-85), 61% female. 73% had type 1 diabetes mellitus (T1DM), overall duration of diabetes 18 yrs (2-53). Mean BMI was 26.7 (16.2-40) kg/m². 39% were nonsmokers, 21% current smokers. 82% had one or more other diabetes related complications. Median duration of diabetes before diagnosis was 11.5yrs (0-43). The cohort had had 65 hospital admissions in the preceding 12 months, median of 1 (0-15) hospital admission per patient. 332 outpatient clinic visits were recorded. In those with T1DM, 33% were receiving subcutaneous insulin infusion, while 67% of those with T2DM were receiving insulin. Diabetes was stable in 30% of patients (T1DM, T2DM 4). Nausea and vomiting were the most prominent symptoms reported by 97% of patients. Other symptoms included bloating (61%), early satiety (30%), constipation (33%) and diarrhoea (21%). Diagnosis was confirmed by scintigraphic single phase solid meal gastric emptying studies in 88%. 64% adopted lifestyle modifications with 43% reporting sustained benefit. Prokinetic medications included metoclopramide (58%), domperidone (76%), prochlorperazine (12%) and erythromycin (33%) with less than half of patients experiencing lasting benefit. Prucalopride was used in 11% with 55% reporting benefit. Pyloric antrum injection with Botulinum toxin A was carried out in 15% with 20% reporting lasting benefit. Gastric electric stimulator was inserted in 8 (24%) patients 2 of whom had maintained benefit while the rest lost benefit within a few month of device insertion. Surgical procedures were required in 3 (9%) pts. Scores from Quality of life and Gastroparesis Cardinal Simpson Index questionnaires showed no correlation with glycaemic control or diabetes stability. Conclusion: Diabetic patients with gastroparesis have increased health needs and multiple complications and treatment is often of only transient benefit. There was no correlation between duration of diabetes or diabetes control and or quality of life scores.

BARRETT’S OESOPHAGUS SURVEILLANCE
Idrees N, Punnoose S, Vasani J, Chaudhury B
North Tees and Hartlepool NHS Trust

Barrett’s oesophagus is a pre-malignant condition and regular surveillance endoscopy (SE) is recommended by British society of Gastroenterology (BSG) for early diagnosis and management of high grade dysplasia/cancer to improve patient survival. However, there is no convincing evidence on cost
effectiveness or survival benefit of SE in these patients. The audit was carried out to check the hospital’s compliance with BSG guidelines, the incidence of oesophageal cancer and the effectiveness of SE in improving patient outcome. A retrospective study was carried out which identified all patients diagnosed with Barrett’s oesophagus in 2008 who were then followed up for five years. Of the 155 patients identified, 58% were male with a mean age of 70.1. Diagnosis was confirmed with endoscopy and histology in 86% of the patients and of these only 42% were put on SE. The main reason for not being on surveillance endoscopy was advanced age (45% of patients not on surveillance endoscopy were >80 old). Of the patients on SE, 91% had 2 yearly SE. At the end point, 20% (31) of patient were dead, 5 of them died of oesophageal cancer. 2 of these had oesophageal cancer diagnosed at index endoscopy and were excluded from audit. Of the remaining three, two were on surveillance endoscopy. 83% of patients were treated appropriately with PPI’s.

**Conclusion:** Our audit showed that incidence of oesophageal cancer was 0.39% per year in patients with Barrett’s oesophagus. SE did not have a significant impact on patient survival. This audit suggests we can reduce the frequency of surveillance endoscopy.

**HOW EFFECTIVE IS MYOCARDIAL PERFUSION SCANNING IN PREDICTING THE NEED FOR RE-VASCULARISATION IN PATIENTS WITH CHEST PAIN**

Dr M Taylor, Dr A Knight, Dr Z Htet, Dr S McClure
Sunderland Royal Hospital

Numerous studies have demonstrated myocardial perfusion scanning (MPS) to be effective in detecting significant coronary artery disease but there is a risk of missing balanced ischaemia in patients with multi-vessel disease. We evaluated data from 529 patients who had a MPS performed as the initial investigation for chest pain during a 6 month study period. Patients were then followed up for 1 year. The results of angiograms performed post MPS (and the incidence of re-vascularisation) were compared with the MPS results. The MPS result was an important determinant in whether patients underwent angiography. Only 9.72% of patients with a negative MPS were referred for angiography. Of these, 22% were suitable for revascularisation. Overall, only 2% of patients with a negative MPS were referred for revascularisation. 30% of patients who had a positive MPS were found to have normal vessels or mild disease. The majority of these patients presented with atypical pain.

**Conclusions:** We confirmed that MPS was a useful non-invasive investigation for detecting haemodynamically significant coronary artery disease likely to benefit from re-vascularisation. However we found MPS misses significant lesions, particularly in patients with balanced ischaemia. Patients with multi-vessel disease who have the most to benefit from re-vascularisation could have a negative MPS.

**TREATMENT OF RHEUMATOID ARTHRITIS IN PATIENTS WITH ASSOCIATED LUNG DISEASE BY B-CELL TARGETED THERAPY**

Iqbal K and Kelly CA
Queen Elizabeth Hospital, Gateshead

40% of rheumatoid arthritis (RA) patients demonstrate extra-articular manifestations including lung manifestations. Studies report 30% prevalence of bronchiectasis and 5% prevalence of interstitial lung disease (ILD). Lung disease can profoundly impact wellbeing and is directly responsible for 10-20% of all mortality. Recent advances imply both lung damage and articular disease processes are initiated and potentiated by CD20+ B-cell hyperactivity. Anti-B-cell CD20 antibody rituximab is therefore a promising therapeutic option. We examined the outcome of rituximab in patients with RA-bronchiectasis, RA -ILD and RA alone. We collected retrospective data from a single UK centre on 53 RA patients receiving rituximab. Presence of any pulmonary comorbidity and articular disease activity scores (DAS) pre- and post-rituximab were recorded. In those with lung disease, baseline and follow-up lung function data (PFTs) were also recorded. A total of 18 RA patients with lung disease and 35 RA only patients were identified. Median age of patients was 68 and male to female ratio was 1:3.4. Average fall in DAS was 1.79 and was not influenced by pulmonary comorbidity. Pulmonary function pre- and post-rituximab showed non-significant decrease.

**Conclusions:** Rituximab appears well-tolerated in RA. But there is no evidence to suggest it has a beneficial
effect on pulmonary function in RA-associated lung disease.

**AMBULATORY CARE – HAS IT REACHED ITS LIMIT?**
Gibbins C, Wahid S T
South Tyneside District Hospital

Systems of ‘Ambulatory Care’ (AC) have been promoted as a way of reducing hospital admissions. South Tyneside Hospital has an established AC that is ‘pathway led’ by nurse practitioners supported by a staff grade doctor. The number of patients managed in AC has remained static between 2012 and 2014. We investigated whether it is possible to identify more ‘non-pathway’ patients in the Emergency Department (ED) that could be managed through AC and reduce bed pressures. 40 patients that were admitted for under 12 hours were identified retrospectively and their notes reviewed. The RCP recommends an Amb Score tool to select patients for management in AC. The Amb Score comprises variables including Age, EWS, transport, IV treatment, delirium, recent discharge and gender. A score greater than 6 predicts successful management through AC. Data were available for 27 patients. Mean age was 55. 23 (85%) patients had an Amb Score greater than 6. Only 4 patients (14%) had provisional diagnoses in the ED that would have been suitable for our AC. 11 patients (40%) had a diagnosis of acute coronary syndrome. Admission diagnosis and discharge diagnosis correlated positively in 7 patients (25%).

**Conclusions:** The Amb Score is not useful for predicting management in our AC. Further development should focus on supporting diagnostic accuracy and increasing senior presence in the ED.

**IMPROVING JUNIOR DOCTORS’ CONFIDENCE AND KNOWLEDGE OF CHEST DRAIN RELATED ISSUES**
Caroline Tait, Mark Weatherhead
Wansbeck General Hospital

Our survey which was completed by seventeen foundation doctors looked at confidence in assessing patients with chest drains. 94% of doctors surveyed (16/17) had little or no confidence in assessing patients with chest drains. 35% (6/17) stated they could remove a drain competently, although when questioned, two described an incorrect technique. We designed and delivered a teaching session on chest drains for foundation doctors. All who attended felt their confidence in assessing patients with chest drains had improved, and that training on this topic would be a useful addition to their teaching curriculum. As a result, this has now been integrated into the foundation teaching programme.

**Conclusions:** This study has highlighted the value of training in chest drain management for foundation doctors who are often the first responders to patients with chest drains problems.

**SIZE DOES NOT MATTER**
Avinash Aujayeb, Caroline Tait, Mark Weatherhead
Northumbria Healthcare NHS Foundation Trust

CT guided biopsies are common procedures for investigations for lung masses, and chest X rays are often done out of hours to check for iatrogenic pneumothorax, the interpretation of which and subsequent management might not be correct. BTS guidelines suggest that size of pneumothorax, co-existent lung pathology and symptoms should be considered in the decision, with aspiration as initial treatment. 312 CT guided biopsies were done between Aug 2012 and Nov 2014. There were 54 pneumothoraces (male 34, average age 74.5 years), giving a 17% pneumothorax rate (quoted rates are between 0-61%). 20 had large pneumothoraces, 4 of whom had symptoms at the outset, and 4 developed them. Only these 8 had chest drains inserted by a respiratory physician. No chest aspiration were performed. All survived to discharge and had subsequent complete re-expansion.

**Conclusions:** We propose a symptom-, rather than size- based approach to management of iatrogenic pneumothorax.

**AN UNUSUAL CASE OF TENDER HEPATOMEGALY IN A PATIENT ON PERITONEAL DIALYSIS**
Sarah Mc closkey, Katy Jones,
Wansbeck Hospital

Our 55 year old lady had a 4 week history of bilateral parotid swelling and acute right upper quadrant pain
on a background of weight loss over 6 months. Her past medical history included end stage renal failure requiring peritoneal dialysis (PD), hypertension and previous asymmetric polyarthritis. On admission she had tender hepatosplenomegaly and bilateral non-tender parotid enlargement. Investigations showed hypertriglyceridaemia, hypercholesterolaemia and mildly deranged LFTs. CT showed massive hepatomegaly with diffuse fatty infiltration and bilateral diffuse fatty infiltration of the parotids. Liver biopsy confirmed acute steatohepatitis with a degree of fibrosis. PD was stopped and she commenced HD. Within 48 hours lipid levels had significantly improved. There was a sustained reduction at 1 month along with resolution of the patient’s symptoms and a reduction in parotid size. Patients on peritoneal dialysis (PD) have worse lipid profiles with more hypertriglyceridaemia than patients on haemodialysis (HD). In patients on PD the large carbohydrate loads, intraperitoneal protein losses and a chronic inflammatory state drive endogenous fat synthesis.

Conclusion: There is a recognised association between subcapsular steatohepatitis and the use of intraperitoneal insulin for the treatment of diabetes in PD patients. However this is the first documented case of a PD patients developing clinically significant extrahepatic fat deposition.

TREATMENT FAILURE OR SERUM SICKNESS-LIKE REACTION – THE GREAT IMITATOR?
Newton A, Graham RG, Turley AJ
The Friarage Hospital, Northallerton

Serum sickness-like reaction (SSLR) is a rare immunological condition that may develop following exposure to certain drugs including cephalosporins. It is a type III hypersensitivity response to heterologous proteins although its underlying mechanism is unclear. We present a challenging case of SSLR to ceftriaxone that highlights the need for clinical awareness of such an adverse outcome. A 51-year old male farmer, with a known bicuspid aortic valve, stented aortic coarctation and recent dental infection, presented with a 2-week history of intermittent sweats, fever and dry cough. There were no peripheral stigmata of infective endocarditis (IE). Thoracic stent infection was excluded and a trans-oesophageal echo confirmed a bicuspid aortic valve but no evidence of vegetations or aortic root abscess. Treatment with penicillin and gentamicin was started and converted to once daily ceftriaxone 2g once sensitivities were known. He improved but experienced fevers and rigors after 3 weeks and was readmitted. Repeat blood cultures were negative, CRP rose from 27 to 258 and ALT increased from 23 to 144. A repeat TOE was normal as was CT chest, abdomen and pelvis. Ceftriaxone was discontinued and vancomycin initiated for the final part of his 4-week course. His Hickman line was removed and no organisms identified from it.

Conclusion: SSLR is a rare immunological condition that may develop following exposure to certain drugs including commonly used antibiotics. As in our case, it usually rapidly resolves on stopping the drug.

CARCINOID HEART
A Mushi, S S Myagerimath, M Hamad
Sunderland Royal Hospital

Carcinoid disease is a rare but an important cause of tricuspid and pulmonary valve disease. 20% of patients with carcinoid syndrome will have carcinoid heart disease (CHD) at diagnosis. The most common pathology is involvement of the right-sided valves; involvement of left-sided valves is almost invariably associated with PFO or, rarely, bronchopulmonary tumour or poorly controlled carcinoid syndrome. The development of CHD leads is associated with a poor prognosis in patients with carcinoid disease. The 3-year survival of patients with carcinoid syndrome and CHD was found to be 31% compared with 68% in patients with carcinoid syndrome without CHD. We report a 62yrs old lady presenting with a 2 weeks history of ankle swelling, shortness of breath and lethargy. She had no wheezes, diarrhoea or flushing. An echocardiogram showed right ventricular failure with tricuspid regurgitation. A CT scan revealed multiple lesions in the liver and a 24 hour urine test for 5HIAA confirmed the diagnosis of metastatic carcinoid tumour.

Conclusion: Carcinoid heart disease should be considered in patients with right-sided cardiac failure with no other risk factors even if there are no overt features of carcinoid syndrome.
RECOGNISING AND TREATING STROKE-LIKE EPISODES IN ADULT MITOCHONDRIAL DISEASE

Yi Shiau Ng, Grainne A Gorman, Andrew M Schaefer, Robert McFarland, Doug M Turnbull
NHS Highly Specialized Service for Rare Mitochondrial Disorders, Newcastle upon Tyne

The estimated prevalence of mitochondrial disease is 1 in 4300 and multi-system manifestation is common; neurological involvement being present in up to 70% of cases. Stroke-like episodes may be the first neurological manifestation of mitochondrial disease in a discreet group of adult patients that triggers acute hospital admission. The underlying pathophysiology and clinical features of stroke-like episodes are distinct from embolic strokes and are thought to be the result of cellular energy failure, precipitating impaired cellular homeostasis and development of cerebral lesions that mimic ischaemic changes on MRI brain imaging. Seizures with occipital foci or focal motor seizures are frequently present at the early stage of stroke-like episodes but are often overlooked until generalized seizures and/or encephalopathy ensue. The differential diagnosis of these episodes includes migraine with aura, infective encephalitis, autoimmune and other forms of encephalopathy and the diagnosis of mitochondrial disease not considered until the patient has had numerous admissions. These stroke-like episodes warrant prompt and aggressive seizure management to limit the extent of cerebral damage. We present a number of clinico-radiological and laboratory features of these SLEs and discuss current acute management guidelines.

Conclusion: Stroke-like episodes can be the first manifestation of mitochondrial disease and effective seizure management is essential in preserving cerebral function and minimizing disability.

AN INQUIRY INTO NEEDLESTICK INJURIES

C Benson, M Shipley
South Tyneside District Hospital

Qualitative questionnaires on needlestick injuries were given to 45 junior doctors. 14 needlestick injuries were reported in the last year from 11 doctors (24%). 5 reported injuries were sustained at weekends and 2 on night shifts, all others were sustained Monday-Friday in normal working hours. 10 were on general medical wards, others were sustained on general surgery (2), Care of the elderly (1) and A&E (1). 6 were sustained while cannulating, 5 during venesection and 3 while taking arterial blood gas samples. Devices with safety features were involved in 9 of these situations. Gloves were only worn for 10 of the 14 injuries. Only 11/45 always wore personal protective equipment during exposure prone procedures. 20/45 stated sharps boxes were often overfilled. Self-carelessness was stated as the most common reason for injury (7) with being overworked (4) and a confused/violent patient (2) stated as others.

Conclusion: Needle-stick injuries are a common occupational hazard for junior doctors. Despite introduction of safety devices these events still occur. Strict guidelines regarding personal protective equipment exist but are not followed. There is need to improve self-care amongst junior doctors. Employee training, effective disposal systems and surveillance programs may be effective in reducing events.
Invited lecture

STANDING UP FOR FATIGUE

Julia Newton

Dean of Clinical Medicine & Professor of Ageing and Medicine
Clinical Academic Office, The Medical School, Newcastle University

Fatigue is the commonest reason why people consult their GP. Fatigue can arise in association with a range of chronic diseases such as RA, Sjogrens, NAFLD, PBC or with a constellation of other symptoms when it is diagnosed as chronic fatigue syndrome. Increasing evidence is pointing towards physiological abnormalities that occur in association with fatigue particularly dysfunction of the autonomic nervous system. The Newcastle Fatigue Research Centre brings together researchers and clinicians interested in the symptom of fatigue. Studies will be presented that highlight muscle, cardiac and cognitive abnormalities identified in patients with CFS and fatigue associated chronic diseases. JN is board member of the International Association for CFS/ME and executive member for the UK CFS Research Collaborative.

Association Business

Date of next meeting:
This is the summer evening meeting. Subject to confirmation. It will be on Thursday July 2nd 2015 6:00 pm to 9:00 pm. Refreshments and buffet supper provided free. Three hours CME approved. This is the provisional date BUT please do check the website http://anep.co.uk/

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 250 words including a short conclusion) before 24th May to the secretary clive.kelly@ghnt.nhs.uk.

A generous legacy has enabled us to increase the value of the Margaret Dewar prize for the best junior doctor or medical student’s presentation. There is now an annual prize of £150 for the best oral presentation of the year, £100 for the runner-up and £50 for the best poster.

We are keen to encourage all consultants and specialist registrars to join the association. 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.

Lastly, do look at the web site of the Association on http://anep.co.uk/ which contains details of future meetings plus back numbers of the Proceedings over the past 10 years and other issues relating to the Association.

We hope to see you in July