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Proceedings of the Association of North of England Physicians

Age -adjusted D-dimer is a safe method to increase the specificity of D-dimer testing and reduce scans performed for patients with possible venous thromboembolic disease.

Use of CREWS (chronic respiratory early warning score) will reduce the number of mandatory observations for stable patients with chronic respiratory disease so improving the patient experience and reducing the risk of observation fatigue.

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Abstracts of the meeting held on Wednesday, 14 March 2018
Freeman Hospital

UNDERGRADUATE EXPOSURE TO THE MULTIDISCIPLINARY MANAGEMENT OF FRAIL OLDER PEOPLE.

J Hardisty, H O'Neil, J O'Connell, R Hancock, R Lucas, L Parkin
Sunderland Royal Infirmary

Teaching sessions were developed, employing the techniques of inter-professional education and simulation to replicate the complexities of managing frail older people in clinical practice. In the teaching sessions students were in mixed groups of pharmacy and medical students and worked through two cases created to exemplify the most common characteristics of a frail older person. Tasks included creating a problem list, medicine reconciliation, reviewing medication and producing discharge information. The facilitators were from medical and pharmacy backgrounds. A low fidelity 'old age' simulation suit was used to allow the students to attempt real life tasks from the perspective of a frail older person including taking medication and making themselves a drink. Feedback was obtained from 64 students before and after the teaching session. The RIPLS (Readiness for Inter-Professional Learning Score) was used to assess inter-professional learning. Free text comments were gathered. Feedback was positive for knowledge acquisition, prescribing skills, communication around hospital discharge, diagnosis, the multidisciplinary team and professional and reflective skills.

Conclusion: It is feasible, acceptable and useful to introduce teaching on the multidisciplinary management of frail older people in early clinical training.

AUDIT OF CARE OF PATIENTS IN THE DIABETIC FOOT CLINIC

Ramesh Vanka
James Cook University Hospital

This was a re-audit of care delivered to patients with diabetic foot complications comparing HbA1c, blood pressure, smoking habit and use of statins between 2013 and 2015. There was a 30% improvement in patients meeting the target BP range, improvement in smoking documentation by 79% and a 10% increase in statin description, but only a 2% improvement in the number of patients meeting the target reduction in HbA1c.

Conculsions: This re-audit showed there had been an improvement in blood pressure, smoking documentation and statin use but little change in glycaemic control between 2013 and 2015.

THE MANAGEMENT OF BARRETT'S OESOPHAGUS IN A REGIONAL ENDOSCOPY UNIT; A PRACTICE AUDIT

Ravi Ranjan, Christopher Wells, Iosif Beintaris
University Hospital of North Tees

We audited the management of 120 patients against the British Society of Gastroenterology Barrett's Oesophagus (BO) management guidelines to investigate whether patients with dysplastic BO had been referred to the upper gastrointestinal multidisciplinary team, whether patients with high-grade dysplasia had been referred to the regional tertiary centre and whether surveillance intervals had been followed (2-3 yearly or 3-5-yearly or 6-monthly, depending on length/presence/grade of dysplasia). 39 patients were newly diagnosed, 76 were known cases. Deviation from guidelines was observed in 19 cases; 4 had repeat endoscopy booked too soon, one was booked too late, whilst fourteen had no follow-up (12 without obvious reason, 2 had follow-up recommended but not booked).

Conclusion: This audit highlights the need for improvement of our BO service. Our action plan includes development of a robust system for monitoring histology, implementation of safety nets in surveillance bookings and establishment of dedicated lists performed by experienced endoscopists.

MANAGEMENT OF RHEUMATOID ARTHRITIS AND INTERSTITIAL LUNG DISEASE

Dr Clive Kelly, on behalf of the British Rheumatoid Interstitial Lung (BRILL) network.
Queen Elizabeth Hospital Gateshead

Until 2000 the mean survival of patients with interstitial lung disease associated with Rheumatoid Arthritis (RA-ILD) was less than three years. We established a network to review the cause of this condition, study its natural history and assess the potential role of new therapies on survival. This necessitated a large retrospective UK study spanning 25 years. We recruited 290 patients from across 18 UK centres collecting data on clinical, physiological, radiological, serological and therapeutic variables. We divided patients into quartiles based on year of diagnosis and followed them to assess whether mortality had altered over time and the role of new therapies in the changing survival pattern. We showed the development of RA-ILD was strongly associated with male sex, heavy smoking and the presence of strongly positive cyclic citrullinated peptide (CCP) antibodies. We demonstrated that extensive Usual Interstitial Pneumonia (UIP) was associated with an eightfold increase in mortality compared to limited Nonspecific Interstitial Pneumonia (NSIP). We found survival increased from a mean of 2.6 years from diagnosis in the first quartile (1988-1995) to 11.8 years in the most recent quartile (2009-2015). The factors associated with this significant improvement include the use of B cell monotherapy (rituximab) and mycophenolate.

Conclusions: Patients with established RA-ILD can now expect an improved survival if their condition is treated with mycophenolate rather than steroids and azathioprine. If their condition necessitates biologic therapy, our data suggest that outcomes are improved by using rituximab in preference to anti-TNF therapy.

USING CREWS IN PATIENTS AT RISK OF HYPERCAPNIC RESPIRATORY FAILURE

Andrew Brown, John Steer
Northumbria Specialist Emergency Care Hospital

The NEWS (National Early Warning Score) was recommended by RCP in 2012 as a national standard for patient monitoring. Patients with chronic respiratory disease often have abnormal NEWS scores when clinically stable. We retrospectively recorded NEWS and CREWS (chronic respiratory early warning score) on three consecutive days in patients with chronic respiratory failure (CRF) and assessed the impact of CREWS on the frequency of patient observation and need for escalation. A Score of ≥5, or 3 in any domain, requires hourly observations; ≥7 requires half-hourly observations and escalation to the Specialist Registrar and Critical Care outreach team. 78 charts were analysed, 32 had CRF. Median (inter-quartile range) NEWS score in CRF patients was 3.5(3-6), CREWS was 2(0.5-3.5). This was compared to NEWS 2(1-3) in those without CRF (n=46). Using NEWS scores, 53% of patients with CRF required hourly observations and 22% required escalation. On application of CREWS, this would have been reduced to 19% and 3% respectively.
In those without CRF 4.3% required escalation.

Conclusion: Use of CREWS will reduce the number of mandatory observations for stable patients with chronic respiratory failure so improving the patient experience and reducing the risk of observation fatigue.

VARIABLE PHENOTYPIC PRESENTATIONS OF RENAL INVOLVEMENT IN FABRY DISEASE

McCloskey S, Brennan P and Sayer JA
Newcastle upon Tyne Hospitals and Institute of Genetic Medicine, Newcastle University

Fabry disease (first described in 1898 by William Anderson and Johannes Fabry) is an X-linked genetic deficiency in the alpha galactosidase enzyme resulting in intracellular accumulation of glycosphingolipids and multisystem organ dysfunction. Around 50% of males and 20% of affected females will have renal involvement, ranging from proteinuria, reduced renal function, renal parapelvic cysts and end stage renal disease (ESRD) requiring dialysis or renal transplantation. The phenotypic presentation of Fabry disease is varied and will even vary between family members with the same confirmed genetic mutation. Identification of an index case will typically lead to 3-4 cases being identified by cascade screening. In a cohort of patients affected by Fabry disease we reviewed the different phenotypic presentations of 8 index cases with renal disease and the renal manifestations within their 29 affected family members. The mean age of presentation was 40 (range 23-59) and 6 of the 8 index cases were male.

hincluding cardiac, neurological, cerebrovascular and skin involvement. 2 of the male index patients developed ESRD requiring renal replacement therapy. 2 female index patients had only hypertension and proteinuria at presentation and the remaining patients had either stable or progressive chronic kidney disease at the time of diagnosis.

Conclusion: The phenotypic variation demonstrates the need for a high index of suspicion for Fabry disease. We highlight the importance of cascade genetic screening to identify additional affected or at risk family members.

NEAR FATAL EXACERBATION OF HEPATIC ENCEPHALOPATHY DUE TO SODIUM VALPROATE.

Leila Izadi Firouzabadi, Kirstin Geer, Paul Mead
West Cumberland Hospital

We report the case of a 51 year old male patient who was found in a collapsed state, suffering from respiratory distress. Past history was of alcoholic liver disease and epilepsy. Medications included sodium valproate, gabapentin, omeprazole, thiamine and codeine. On admission he required early intubation and ventilator support. Initial investigations revealed evidence of community acquired pneumonia together with poor synthetic liver function and raised serum ammonia levels. He received inotropic support, IV antibiotics, Lactulose, Pabrinex and Rifaximin. By day 7 he was showing little progress with continued elevated serum ammonia levels. After reviewing his ongoing medication together with a literature review sodium valproate was discontinued. Following this his serum ammonia levels fell and there was clinical improvement resulting in successful removal of ventilatory support, discharge from intensive care, and eventually discharge home.

Conclusion: This case illustrates the importance of a thorough understanding of the effects of prescribed medications and their ability to result in significant harm especially in the presence of liver disease.

GITELMAN SYNDROME CAUSING ACUTE RENAL FAILURE & RHABDOMYOLYSIS

Simon G Findlay
Queen Elizabeth Hospital, Gateshead

A 39 year-old gentleman was admitted to the acute medical unit with hypotension and muscular weakness. Serological testing showed a hypokalaemic hypochloraemic metabolic alkalosis and acute kidney injury. The diagnosis of Gitelman syndrome was established through exclusion of other causes of acute renal failure and was supported by serum and urinary biochemical profile. Gitelman syndrome, like Bartter syndrome is a congenital renal tubulopathy Patients with Bartter syndrome have a predisposition to hypercalciuria leading to nephrocalcinosis, normal serum magnesium, secondary hyperaldosteronism and an impaired urine concentrating ability. Conversely, Gitelman syndrome exhibits hypocalciuria without nephrocalcinosis, low serum magnesium and no urinary concentrating defect. Both genetic conditions demonstrate autosomal recessive inheritance and affect renal sodium reabsorption. Bartter syndrome, like Gitelman syndrome, is a salt-losing renal tubulopathy with the defect of sodium reabsoprtion originating in the thick ascending limb of the loop of Henle. Bartter syndrome typically presents in childhood and mimics the effects of chronic ingestion of a loop diuretic whereas Gitelman syndrome presents into adulthood and replicates the thiazide diuretic action. In our patient, intravenous, then oral electrolyte replacement resulted in resolution of symptoms within 48 hours.

Conclusion: We present a patient with a rare but potentially serious condition to raise awareness of Gitelman's syndrome as a differential diagnosis of hypokalaemic hypochloraemic metabolic alkalosis and acute kidney injury.

PREVALENCE OF PRIMARY HYPOGONADISM AMONG MALE MEDICAL INPATIENTS WITH UNEXPLAINED ANAEMIA

Ahmed Al-Sharefi, Conor McGreevy and Richard Quinton
The Royal Victoria Infirmary

Male hypogonadism is linked to anaemia, sarcopenia and osteoporosis and is worth diagnosing, because treatment is cheap, safe and effective. Because testicular function is well-maintained in over 95% of older men, expert opinion does not support an upper age limit for initiation of testosterone (T) therapy in well-founded male hypogonadism. Indeed, we have recently reported positive outcomes for men with hypogonadotropic hypogonadism (HH) receiving pubertal-induction with T in older age. Among medical inpatients, HH can be hard to distinguish from the biochemical and haematological profile of non-gonadal illness, whereas primary hypogonadism (PH), is easily recognised through raised gonadotropin levels. As the European Male Aging Study found 5% of older men to have raised gonadotropins and 2% to also have frank PH with low serum T, we measure serum FSH (as marker of PH) in men with unexplained (normal haematinics; no suspicion of GI bleed) anaemia and proceeded to measure early morning testosterone level if FSH raised (>12 *IU/L*) - before considering more invasive investigations, or arbitrarily ascribing anaemia to old age. 16 patients met our inclusion criteria; 7 (43%) had a raised FSH level; 6/16 (37%) also has had low T (=frank PH) and all 6 were started on T replacement, including 2 who had previously been receiving bisphosphonates for osteoporosis.

Conclusion: PH is commonly associated with anaemia in older male medical inpatients and is easily identified by the non-specialist. Treatment has the potential to reverse anaemia, as well as improving bone density, muscle bulk and, if relevant, sexual function. Screening for PH should form part of the routine anaemia work-up.

AGE ADJUSTED D-DIMER: READY FOR PRIME TIME?

S Noh, A Langridge, C Routh
Department of Acute Medicine, Northumbria Healthcare NHS Trust

D-dimer testing has a lower specificity for venous thromboembolism (VTE) in the elderly population than the general population. In June 2015 age-adjusted D-dimer (A2D2), which uses a variable cut-off for patients >50 years (upper limit of normal = age/100mg/L), was introduced across Northumbria Trust in response to an in-house audit that suggested it would increase specificity and decrease costs. We evaluated adherence to our new pathways and assessed the impact of A2D2 on cost and patient safety. All patients aged >50 presenting with suspected VTE during January and April 2016 were identified retrospectively. We wanted to know if a negative A2D2 had resulted in avoiding a radiological investigation being performed. Of the 249 patients assessed for suspected VTE, 55 patients were not scanned. 14 of these had a negative A2D2 but would have been imaged using the previous fixed cut-off. 20 patients were discharged from A&E with a negative A2D2 who previously would have required onward referral for further investigation. Radiology department savings after the intervention were £1,984, which rises to £8,484 when the costs of avoiding a referral to Ambulatory Care are included. For an entire year, estimated savings would be £50,904.

Conclusion: A2D2 is a safe method to increase the specificity of D-dimer testing and reduce scans performed for patients with possible VTE. The results have shown a cost benefit to using the A2D2 and have reduced the number of patients requiring onward referral for further investigation.

Association Business

Date of next meeting: Wednesday 11th July 2018 6.00 pm Freeman Hospital.

This takes place after the GIM teaching at the 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).

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.

Have you considered presenting 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.

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

Lastly, a sincere vote of thanks from us all to Clive Kelly who has been secretary for the past 12 years. He will continue to be very much involved with the Association but has now passed the mantle of secretarial responsibilities to Colin Doig. Thank you, Clive. Keep coming to the meetings and keep presenting and thank you for all your hard work over the past 12 years.