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Abstracts

ULSTER SOCIETY OF INTERNAL MEDICINE, SPRING MEETING, FRIDAY 17th May 2013

South West Acute Hospital

2.00 pm **Gout: Diagnosis and Management.** C Donaghy, WH Yau, Dept of Rheumatology, Altnagelvin Hospital, Western HSCT

2.15 pm **Testicular choriocarcinoma: a rare case of thyrotoxicosis arising as a paraneoplastic syndrome.** EJ McCracken[1], PC Johnston[1], JR Lindsay[1], C Mulholland[1], JJA Mc Aleer[2], RN Black.[1] [1]Altnagelvin Area Hospital, Londonderry, [2]Cancer Centre, Belfast City Hospital.

2.30 pm **Two complex cases of paraesthesia: one simple solution.**

CM Doherty, S J Hunt, A Fulton. Department of Neurology, Royal Victoria Hospital, Belfast.

2.45 pm **Guest Lecture:** "Pre-hospital emergency medicine." **Dr Fred MacSorley DipIMC, MBE, BASICS Northern Ireland.**

3.15 pm Afternoon Tea and Poster Viewing

Poster 1 **Colorectal cancer presenting with anaemia.** J. Storm, G. Rafferty. Northern HSC Trust

Poster 2 **2012 BTS (British Thoracic Society) Adult NIV Audit; RVH Vs National Data.**

P McKeag, L Adu-Boateng, AM Nugent: Department of Respiratory Medicine, Royal Victoria Hospital, Belfast HSC Trust, Belfast.

Poster 3 **Accuracy of endoscopic ultrasound in predicting early oesophageal neoplasms.** J. Storm, *S Sah, *D McManus, M Mitchell, I Mainie Pathology Department, Belfast City Hospital. Belfast. Gastroenterology Department, Belfast City Hospital. Belfast.

3.40 pm **Grand Rounds:** Cases from South West Acute Hospital.

Facilitator: Dr Eugene Campbell, Consultant Gastroenterologist, WHSCT.

4.10 pm **Tracheomalacia and relapsing polychondritis – an uncommon complication of an uncommon condition.** D.McCormick, A.Cairns. Department of Rheumatology, Belfast HSC Trust, Belfast, UK.

4.25 pm **Patient Review Post Discharge from the Intensive Care Unit – A Reaudit.**

McConville CB[1], Laverty L[1], McKee R[2], Clarke C[2]. [1]Altnagelvin Area Hospital, Derry, UK. [2]Craigavon Area Hospital, Craigavon, UK.

4.40 pm Presentation of prize for the best abstract

4.45 pm **Guest Lecture:** "The interface between acute medicine and ICU." **Dr Raymond McKee. Consultant in Anaesthesia and Intensive Care, SHSCT.**

GOUT: DIAGNOSIS & MANAGEMENT

C Donaghy, WH Yau

Department of Rheumatology, Altnagelvin Hospital, Western HSCT

Gout is a common, often chronic and debilitating condition, affecting up to 7% of men aged over 65. The British Society of Rheumatology (BSR) and European League Against Rheumatism (EULAR) have designed guidelines[1,2] outlining how to diagnose and manage gout. Fifty-eight patient charts were examined, of inpatients and outpatients who had a diagnosis of gout recorded between 2005-2012. Of these, thirty-eight contained relevant information. Several standards were studied, as laid out by BSR and EULAR. Results demonstrated that 83% of patients were prescribed either oral colchicine or a NSAID for an acute flare of gout; 81% of patients who were being commenced on urate-lowering therapy were also commenced on oral colchicine or a NSAID as prophylaxis during initiation. It is recommended that patients on urate lowering treatment for recurrent gout have their serum uric acid level monitored every two to four weeks until it is at the target level of ≤ 360 µmol/l or 300µmol (EULAR or BSR). No patients had this criterion fulfilled. Allopurinol used in prophylaxis of recurrent gout should be up-titrated in accordance with the serum urate level. 26% of patients had evidence of this. These results demonstrated that on the whole, acute attacks of gout were

being managed appropriately, and appropriate prophylaxis was being prescribed along with urate-lowering therapy. However monitoring of patients on long-term treatment was suboptimal. This highlights the importance of patient education and effective communication between primary and secondary care in order to maximise patient outcomes in chronic conditions such as gout.

Zhang W, Doherty M et al. EULAR evidence based recommendations for gout. Part II: Management. Report of a task force of the EULAR Standing Committee For International Clinical Studies Including Therapeutics (ESCISIT). Ann Rheum Dis. 2006 October; 65(10): 1312–1324.

Jordan KM, Cameron JS et al. British Society for Rheumatology and British Health Professionals in Rheumatology Guideline for the Management of Gout. Rheumatology 2007; 1 of 3.

TESTICULAR CHORIOCARCINOMA: A RARE CASE OF THYROTOXICOSIS ARISING AS A PARANEOPLASTIC SYNDROME.

EJ McCracken[1], PC Johnston[1], JR Lindsay[1], C Mulholland[2], JJA Mc Aleer[3], RN Black[1]

[1]Department of Endocrinology and Diabetes, [2]Department of Urology, Altnagelvin Area Hospital, Londonderry, [3]Cancer Centre, Belfast City Hospital, Northern Ireland, United Kingdom

An 18 year old male presented with dyspnoea, haemoptysis, weight loss and a large right testicular swelling. On examination he appeared cachectic, diaphoretic and tachycardic. A large firm non-fluctuant right-sided scrotal swelling was present. There were no signs of goitre or dysthyroid eye disease. Thyroid function tests revealed biochemical hyperthyroidism: [fT4 38.6 pmol/L (NR: 9.4-18.6), TSH <0.01 mu/L (NR: 0.3- 4.4)].

CT chest demonstrated multiple large pulmonary metastases throughout both lung fields. Testicular ultrasound revealed a 10 cm solid right sided scrotal mass which appeared to entirely replace the right testicle. Human chorionic gonadotrophin (HCG) was measured and was found to be massively raised 1118053.0 U/L (NR: 0-5). A diagnosis of paraneoplastic thyrotoxicosis secondary to metastatic testicular choriocarcinoma was made. Transfer to the regional cancer centre for neo-adjuvant chemotherapy with a view to subsequent surgery was agreed. His condition deteriorated steadily and he died two days later of respiratory failure.

Germ cell tumours produce HCG, of which the α subunit is identical to that of TSH. Thus, the massive rise in HCG associated with germ cell tumours can stimulate the TSH receptor, overcoming its lower binding to TSH-receptors than native TSH and inducing thyrotoxicosis.

This case illustrates the rare occurrence of thyrotoxicosis arising as a paraneoplastic syndrome due to testicular choriocarcinoma. The presentation was significant for clinical features of apparent hyperthyroidism including diaphoresis, palpitations and weight loss that were attributable to his underlying neoplasm. It highlights the importance of a comprehensive clinical history and examination for patients presenting with hyperthyroidism.

TWO COMPLEX CASES OF PARAESTHESIA: ONE SIMPLE SOLUTION.

C M Doherty, S J Hunt, A Fulton. Department of Neurology, Royal Victoria Hospital, Belfast.

A history of excessive alcohol intake is frequently obtained from patients requiring hospital admission; the subsequent healthcare burdens are well established. Management is more complicated when these details prove difficult to elicit.

A 46 year old woman reported visual disturbance, distal sensory symptoms and leg weakness. No history of significant alcohol use was obtained on questioning. Examination findings were consistent with severe sensory axonal neuropathy. A diagnosis of alcohol/nutritional neuropathy and optic neuropathy was made after a clinical opinion of high alcohol intake was given by the hepatology team, and this was eventually disclosed by the patient.

A 53 year old gentleman presented with distal paraesthesia and progressive unsteady gait. There was a prior history of heavy alcohol use with 4 years reported abstinence, neck trauma and treated B12 deficiency. Investigations demonstrated severe axonal and sensory neuropathy. Shortly after admission he became oxygen dependant. He developed confusion and hallucinations on the sixteenth day following admission and EEG showed mild to moderate encephalopathy. A diagnosis of wet beriberi with neuropathy and Wernicke's encephalopathy was made. A history of recent abusive alcohol intake was obtained from the patient's daughter.

In both these cases significant improvement was made after parenteral treatment with thiamine was commenced. Clinicians should maintain a higher index of suspicion despite the absence of history of excessive alcohol intake in presentations of neuropathy, with resultant lower threshold for this simple and inexpensive treatment.

TRACHEOMALACIA AND RELAPSING POLYCHONDRITIS – AN UNCOMMON COMPLICATION OF AN UNCOMMON CONDITION.

D.McCormick, A.Cairns. Department of Rheumatology, Belfast HSC Trust, Belfast, UK.

A 64 year old female presented to our Rheumatology service in 2009 with features in keeping with a sero-negative inflammatory arthritis. Azathioprine resulted in a partial response in joint symptoms after failing other DMARDs. ENT reviewed the patient due to hearing impairment and new indentation of her nose and inflammation of nasal bridge and pinna resulting in classical deformity. A diagnosis of relapsing polychondritis was considered.

A past history of Chronic Obstructive Pulmonary Disease was present. Worsening shortness of breath on exertion and a harsh dry cough were noted. Flow volume loops showed worsening fixed expiratory obstructive picture. High Resolution CT chest in August 2012 showed dramatic images of tracheobronchomalacia and air trapping due to cartilaginous inflammation in keeping with a diagnosis of relapsing polychondritis. Bronchoscopy showed a marked reduction in patency of the trachea and bronchial tree and biopsy was not possible.

There was initial improvement in her "bovine cough" after high dose intravenous methylprednisolone and commencing the anti-TNF agent Infliximab. While there has been no clinical worsening, no further significant improvement has been achieved. Unfortunately the treatment has also been complicated by lower respiratory tract infections.

Cardiothoracic surgeons have also assessed this patient regarding the collapsing airways. It is felt that cartilaginous destruction is too widespread for any stenting to be feasible.

PATIENT REVIEW POST DISCHARGE FROM THE INTENSIVE CARE UNIT – A REAUDIT.

McConville CB[1], Laverty L[2], McKee R[3], Clarke C[3].

Departments of Radiology[1] and Anaesthetics[2], Altnagelvin Area Hospital, Derry, UK. Department of Intensive Care Medicine[3], Craigavon Area Hospital, Craigavon, UK.

Introduction

In the course of an Intensive Care Unit (ICU) admission many patients undergo complex interventions and procedures specific details of which may not be familiar to the patient's medical team on discharge in particular junior ward based staff. Without adequate review these patients are at risk of deterioration during the transition from level three ICU care involving a high number of nursing and medical interactions to first level ward care[1,2] with fewer such interactions. Currently there are no UK guidelines on review of patients following ICU discharge.

Method

Following a one week pilot study, a four calendar week prospective audit examined ward level review of patients following ICU discharge in a university teaching hospital. Following presentation of initial findings with senior medical and surgical staff local guidelines on patient review post ICU discharge were introduced and reaudited prospectively at ten months following the original study. Collected data included patient demographics and medical discipline at point of admission, evidence of verbal and written handover from ICU medics to discharge team, time and day of discharge, documented time interval to review, grade of most senior reviewer, immediate actions taken by the reviewer, subsequent ICU readmission.

Patients who died during ICU admission and those discharged to another hospital were excluded.

Results

Reaudit results demonstrated that recommendations of more senior medical staff and more prompt patient review post ICU discharge, formulated upon discussion of initial audit results, were observed.

Clear documentation detailing patient review was a continued point for improvement.

COLORECTAL CANCER PRESENTING WITH ANAEMIA.

J. Storm, G. Rafferty

Background: British Society of Gastroenterology guidelines state that iron deficiency anaemia should be investigated and confirmed by a low serum ferritin, red cell microcytosis or hypochromia. The main objective of the guidelines is to diagnose significant pathology including colorectal cancer (CRC) . We analysed the number of patients with confirmed colorectal cancer that presented with anaemia and specifically to confirm the number of CRC cases that present with evidence of non-iron deficient anaemia.

Methods: We reviewed the haematology and biochemistry blood results of all Northern Health and Social Care Trust (NHSCT) patients with confirmed colorectal cancer in 2010. Results were obtained for the 12 months prior to diagnosis. Local laboratory criteria was used to confirm the normal range for blood results including Haemoglobin (Hb), Mean Cell Volume (MCV), serum ferritin, serum iron and Mean Cell Haemoglobin Concentration (MCHC)

Results: 221 patients were diagnosed with colorectal cancer in 2010. Mean age was 71 (range 22-92). 50% were male. 49% were anaemic (Hb <12 g/dl). 31% had microcytic anaemia (MCV <83) and 18% had normocytic anaemia. 11 patients (5%) had an iron deficient normocytic anaemia. 18 patients (8%) had a normocytic anaemia but no iron studies performed. 11 (5%) patients diagnosed with CRC had a normocytic anaemia with normal serum ferritin and MCHC. For these 11 patients 9 charts were located and 6 had lower GI symptoms requiring colonoscopy but 3 (1%) were investigated as had low serum iron (but normal MCV, normal MCHC, normal ferritin and no lower GI symptoms)

Conclusion: These results confirm that a significant proportion of CRC patients present with normocytic anaemia (18%). From these figures it suggests that 1% of the total CRC cases had asymptomatic normocytic anaemia with normal MCV, MCHC and serum ferritin. This however does not include the 18 patients with normocytic anemia that had unknown iron status as iron studies not performed. Iron studies should always be performed in investigating patients with microcytic/normocytic anaemia.

2012 BTS (BRITISH THORACIC SOCIETY) ADULT NIV AUDIT; RVH VS NATIONAL DATA.

P McKeag, L Adu-Boateng, AM Nugent: Department of Respiratory Medicine, Royal Victoria Hospital, Belfast HSC Trust, Belfast.

Non-invasive ventilation (NIV) is commonly utilized in the management of patients with type 2 respiratory failure. This study was performed as part of a national audit. The characteristics of patients receiving NIV and outcomes from NIV within our institution were compared with those from other centers in the UK. Thirty-seven charts from all patients receiving NIV within the RVH (Royal Victoria Hospital) between February and March 2012 were reviewed. Thirty-seven patients received NIV. Sixty two percent of patients were female, mean age was sixty-eight years. Sixty two percent of patients' had COPD, nine percent had cardiogenic heart failure, five percent had neuromuscular disease and the remainder had a variety of respiratory disease such a lung cancer, pneumonia and obstructive sleep apneoa. The Mean duration of NIV within twenty-four hours of onset was thirteen point seven hours. In total thirteen people died, equaling thirty five percent of patients. Four Deaths were attributable to non-respiratory disease and nine deaths were attributable to respiratory disease. Twenty-four patients (sixty five percent) were discharged. National results showed seven hundred and fifty four deaths (thirty one percent) with five percent from non-respiratory disease and twenty six percent from respiratory disease. In conclusion, this study demonstrates that the RVH received a large number of patients requiring NIV over a two-month period. It also shows that a substantial number of patients survived to discharge. The RVH had a slight excess of non-respiratory deaths in comparison to other centers, but was otherwise in keeping with national data.

ACCURACY OF ENDOSCOPIC ULTRASOUND IN PREDICTING EARLY OESOPHAGEAL NEOPLASMS.

Judith Storm, *Shatrughan Sah, *Damian McManus, Michael Mitchell, Inder Mainie Pathology Department, Belfast City Hospital. Belfast. Gastroenterology Department, Belfast City Hospital. Belfast.

Background: Adenocarcinoma of the oesophagus has the fastest rising prevalence of any malignancy in the Western world. The majority arise from specialized intestinal metaplasia in the oesophagus, Barrett's oesophagus. Endoscopic ultrasound (EUS) accurately demonstrates the layers of the oesophageal wall, and is believed to be accurate for local T-staging of malignant oesophageal disease.With the introduction of conservative therapies including radiofrequency ablation, photodynamic therapy and endoscopic mucosal resection for Barrett's oesophagus, accurate staging has become increasingly important.

Aim: To determine whether endoscopic ultrasound is accurate for T staging of high grade dysplasia /early neoplasia compared with pathology specimens obtained using endoscopic mucosal resection or surgery.

Methods: Retrospective review of patients evaluated by EUS for assessment of early oesophageal dysplasia, between December 2008 and June 2012 in the Belfast City Hospital.

Analysis: Findings are compared with subsequent surgical pathology, or endoscopy and biopsy follow up.

Results: This study included 38 patients(30 men) with a median age of 66. 1 patient was omitted due to an incorrect scope being used during EUS. EUS accurately predicted T status in 34 of 37 patients(92%). 2 patients thought to have submucosal carcinoma during EUS proved to have mucosal carcinoma on EMR specimens. 3 patients thought to have mucosal carcinoma during EUS were found to have submucosal carcinoma on EMR specimens.

Conclusions: Endoscopic ultrasound was accurate in the staging of T1 oesophageal lesions. EUS should be increasingly used in the assessment of early oesophageal neoplasms.