ACUTE & GENERAL MEDICINE

POSTER ZONE 2018

CONTENTS

Wednesday morning

Highly commended by the judges 

Poster 1

Euglycemic ketoacidosis often missed diagnosis

Ahmed Esahq Abdulghaffar Mohammed Alkhaja, Medical Resident
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SKMC, Abu Dhabi, UAE

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Introduction:

Diabetic ketoacidosis is a common diabetic emergency due to uncontrolled diabetes and is a state of absolute or relative insulin deficiency. Rarely ketoacidosis can occur in absence of hyperglycemia. It is usually related to starvation, SLGT2 inhibitors or alcohol.

Case reports:

Case 1: 49 years-old-female with type 2 DM presented with nausea, vomiting, and epigastric pain. Her medications included metformin and Dapagliflozin. Her initial workup showed high anion gap metabolic acidosis of 28.0 mmol/l, low bicarbonate 18mmol/l and normallactic acid. Her serum glucose was 9mmol/l. She was treated as possible sepsis. Two days later her bicarbonate became profoundly low 11mmol/l and venous blood PH was 7.26. Her beta hydroxybutyrate acid was remarkably high at 9mmol/l (0.02-0.27). She was diagnosed as euglycemic ketoacidosis secondary to Dapagliflozin (SLGT inhibitors) and managed after stopping dapagliflozin with intravenous dextrose and insulin infusion.

Case 2: 78 years-old-male with type 2 diabetes mellitus, hypertension and Parkinson's disease was under ophthalmology team for global eye rupture after fall. Two days later patient was delirious for which transferred to medical team. CT brain was normal. His CBG was 7.2 mmol/l and serum bicarbonate was 17mEq/L. Urine was negative for ketones. Anion gap was 15 and venous PH 7.33 with normal lactate. Due to poor oral intake and lack of appropriate hydration the possibility of euglycemic ketoacidosis was raised. Beta hydroxybutyrate acid was mildly raised at 0.59 mmol/L. Insulin infusion and IV dextrose were given. His mental status improved after 24 hours.

Conclusion:

Ketoacidosis is a life threatening condition that requires prompt evaluation and urgent correction. It can occur in people with or without diabetes and can be associated with euglycemia or hypoglycemia. It is useful to check for acidosis even with normal blood glucose. SGLT2 inhibitors are known culprit and should be stopped. Usually treating the underlying cause can correct it.

References (100 words)

1. Henry RR, Rosenstock J, Edelman S, et al. Exploring the potential of the SGLT2 inhibitor dapagliflozin in type 1 diabetes: a randomized, double-blind, placebo-controlled pilot study. Diabetes Care, 2015; 38:412–419.

2. Kaku K, Watada H, Iwamoto Y, et al. Efficacy and safety of monotherapy with the novel sodium/glucose cotransporter-2 inhibitor tofogliflozin in Japanese patients with

type 2 diabetes mellitus: a combined Phase 2 and 3 randomized, placebo-controlled, double-blind, parallel-group comparative study. Cardiovasc Diabetol . 2014; 13:65.

Poster 2

Recognition and early detection of vertebral artery dissection

Alice MacArthur Foundation Year 2 Doctor Royal Preston Hospital

Vertebral artery dissection (VAD) is a rare clinical event. Despite this, it is the leading cause of ischaemic strokes in patients under 45years of age.[1] This case report explores the presenting symptoms of a woman who was diagnosed with vertebral artery dissection.

A 36 year old female patient presented to hospital with a 1 week history of occipital headache. It was sudden onset following a fall into a swimming pool. Examination was unremarkable. Expand CTA brain scan showed right vertebral artery dissection with a 1cm dissection flap and a 3mm left middle cerebral artery aneurysm. He headache improved with analegsia and she was discharged on Aspirin, with outpatient neurology clinic follow up.

VAD an estimated incidence of 1 per 100,000.[2] Initial presentations are often without neurological signs, and can be easily missed. In 2000, the Canadian Journal of Neurological published an article on warning symptoms in VAD.[3] This retrospective study looked at the early symptoms and warning signs which may help in the early identification and treatment of patients with VAD. They identified 26 patients over a 10year time period. Nearly all patients have pain as a presenting feature (88%), with most as headache in the occipital region.

As clinicians, patient's experience of acute pain can be difficult to interpret. It can be shaped by a host of psychological as well as physical factors – for example anxiety or long standing chronic pain.[4] Only 50% of the patients in the previous study found their pain to be of a worrying intensity. The delay in presentation to the hospital can increase patient's risk of serious complications, such as stroke or haemorrhage.

Overall, the prognosis of patients with VAD is relatively good, with low mortality and morbidity rates. However diagnosis should not be missed, as early treatment can prevent ischaemia and death.[5]

References (100 words)

1. Beletsky V, Nadareishvili Z, Lynch J, Shuaib A, Woolfenden A, Norris JW. Cervical arterial dissection: time for a therapeutic trial?. Stroke. 2003 Dec 1;34(12):2856-60.
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Thanvi B, Munshi SK, Dawson SL, Robinson TG. Carotid and vertebral artery dissection syndromes. Postgrad Med J. 2005;81:383–388.

Poster 3

Beer Potomania: Yet another interesting case of severe hyponatremia

Foundation Year 2 Doctor Lancashire Teaching Hospitals NHS Trust

Title: Beer Potomania: Yet another interesting case of severe hyponatremia.

This case report is based on the story of a 31 year old man who was seen in the acute medical unit with presenting complain of 3 days history of vomiting.

He complained of feeling dizzy, very thirsty and tired with some generalised abdominal discomfort. Patient reported reduced and dark urine output and slightly loose bowel movements. Patient has a significant history of alcohol abuse (drinks 15-20 cans of Lager a day which is around 178-238 units of alcohol per week) and reports poor diet over the past weeks.

Patient was otherwise well & orientated to time and place. Clinical examination revealed nothing remarkable. Bloods were sent off and he was noted to have significantly low serum sodium of 105mmol/L. Serum osmolality was low at 228 mmol/kg.

He was managed with 1.8% of sodium chloride 150mls over 15 minutes intravenously following which his sodium levels improved slowly.

Beer potomania is a condition where serum sodium becomes very low following excessive consumption of alcohol. The pathophysiology of this syndrome which was first reported by Gwindup et al in 1972 begins with the fact that beer has a low solute content and reduces proteolysis. This reduces the solute delivery to the kidneys which results in reduced clearance of excess fluid and thus, dilutional hyponatremia. SIADH and cerebral salt wasting syndrome are other important diagnoses that needs ruling out although they may overlap.

Admission to hospital is also a good opportunity to introduce alcohol liaison team input for patients like this gentleman.

References (100 words)

Beer Potomania. Sanghvi, Shalin R. et al. American Journal of Kidney Diseases , Volume 50 , Issue 4 , 673 – 680

Poster 4

Uncovering an unusual umbilical presentation

Charlotte Elliott ST4 Emergency Medicine Countess of Chester Hospital

Background: During intra-uterine life, the umbilicus is the foetus' life line with multiple structures connected to it. The urinary system, gastrointestinal system and vascular system all pass through this small gap in the abdominal wall. After birth, once the umbilical cord has fallen off and the gap closes, no evidence of these previous connections should be present. However, disorders can occur as a result of non-closure which may present later on in life. Medical presentations involving the umbilicus are uncommon.
Case Report: A case of a fit and well 20-year-old male who presented with a 'bleeding umbilicus' is described. He gave a 3-day history of discomfort and bleeding from his umbilicus. On examination there was a red, shiny, smooth, round lump coming from the umbilicus measuring approximately 1cm in diameter which was oozing blood. Palpation revealed tenderness around the umbilicus with voluntary guarding. Bowel sounds were present.
He was referred to the surgical team for further assessment and management where the lump was examined with the help of lignocaine. They found the lump was not cystic in nature and as they were unable to aspirate anything from within in it, an abscess was excluded. A diagnosis of omphalitis was made and he was discharged with oral antibiotics. In surgical review clinic a week later where the infection had then settled to reveal an umbilical granuloma.
Why should an emergency physician be aware of this?: The unusual presentation provided a learning opportunity to explore the potential diagnosis and refresh knowledge of embryology. Omphalitis, umbilical granuloma, urachal carcinoma, patent urachus, patent omphalomesenteric duct and umbilical abscess are all addressed in this report which serves as a reminder to the physician of the potential diagnosis. In this case he most likely had an umbilical granuloma, although this is most commonly seen in newborns.

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Poster 5

Missing Something? Limbic Encephalitis – a Case Report

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SHO, FY2, Consultant and GPST1

Queen Elizabeth Hospital Woolwich

Case Presentation

A 48 year old hypothyroid female presented with a one week history of fever, lethargy, vomiting and frontal headache. She was currently being investigated for Bechet's due to vulval ulcers.

On examination she was pyrexic at 40^0C, meningitic with erythema nodosum.

An initial diagnosis of sepsis /herpes simplex encephalitis was made.
Laboratory findings are below:

CSF Protein	375mg/mL
CSF Glucose	2.4mmol/L
CSF Macroscopic appearance	Clear and colourless
CSF Polymorphs	0
CSF Lymphocytes	4
CSF Red Cells	50
CSF Pus Cells	None
CSF Organisms	No organisms seen
CSF Herpes Simplex 1 and 2, Varicella Zoster and Enterovirus PCR	Negative
Blood - Hepatitis, HIV, VDRL	Negative
Blood - ASOT, immunoglobulins, voltage gated channels, NMDA channels, protein electrophoresis and immunofixation	Normal
Blood - Gastric parietal cell antibody	Positive

CT head scan revealed low attenuation in the left basal ganglia and some obliteration of the left temporal horn. MRI brain showed high-signal intensity change in the right temporal lobe in keeping with encephalitis. An EEG showed focal cerebral dysfunction over the left temporal region suggestive of limbic encephalitis.

She was treated unsuccessfully with acyclovir. Switching to steroids resulted in rapid resolution of symptoms and the erythema nodosum.

Discussion

Limbic encephalitis (LE) is an inflammatory process involving the limbic system [1]. Once thought to be rare, it's increasingly more recognised [2]. LE is characterised by severe impairment of short-term memory, depression, anxiety, hallucinations, and seizures [1]. It is commonly part of a paraneoplastic syndrome, often associated with small cell lung cancer, breast and testicular tumours. It can also occur without malignancy [3]. There are four main diagnostic approaches [4]:

1. Autoantibody screening e.g. VGKC, NMDA
2. Imaging: MRI brain
3. EEG
4. Cancer screening

Learning Points

a. Vulval ulcers may be autoimmune not herpetic.

b. Consider autoimmune aetiology in encephalitis.

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2. Honnorat J. Autoimmune Limbic Encephalitis: An expanding concept. Lancet Neurology. 2010; 9 (1): 24-25.
3. Armangue T, Leypoldt F, Dalmau J. Autoimmune Encephalitis as a Differential Diagnosis of Infectious Encephalitis. *Current Opinion in Neurology*. 2014; 27 (3): 361-368
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Poster 6

Case report Abstract Title: An unusual presentation of a pancreatic problem

Dr Georgina Keyte, FY2, Doctor, County Durham and Darlington Foundation Trust

A 48 year old Bangladeshi male presented to the emergency department with acute frank haemoptysis, shortness of breath on the background of 6 month cough. On further questioning he had a history of alcoholic excess, anorexia, significant weight loss and a family history of TB. Examination showed clubbing grade 2, decreased air entry to the left base and demonstrable orthopnoea Bloods showed hyponatraemia, raised CRP, stable haemoglobin and no clotting abnormalities. Chest X-ray showed a large left sided pleural effusion, which was not present on a previous X-ray. The patient then had a CT TAP, confirming the presence of pleural effusion, with a located cystic collection seen at the collapsed left base which was continuous with a further sub diaphramagmatic collection extended into the pancreatic tale. A pleuritic tap found exudative fluid. The patient underwent bronchoscopy for further investigations.

Bronchial lavage demonstrated no acid fast bacilli and enrichment cultures were negative. Histology report suggested atypical features of uncertain clinical significance.
The patient was treated supportively with antibiotic therapy, vitamin K and advice to lie in the left lateral position to prevent asphyxiation of the right lung.

The combination of weight loss, haemoptysis (indicative of lung parenchymal involvement), pleural effusion and grade II clubbing were supportive of an underlying malignancy. However given the family history and foreign travel TB was a differential that needed excluding. On further investigation neither of these diagnoses were apparent. Given the CT findings of a collection below the diaphragm and a pseudocyst in the tail of the pancreas, a different cause was considered. In the context of chronic alcoholism the pleural effusion appears to be reactive and has led to a diaphragmatic irritation and chronic cough. The haemoptysis is therefore concluded to be mechanical in origin and related to a previously undiagnosed history of chronic pancreatitis.

References (100 words)

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Poster 7

Hepatic Subcapsular Biloma Following Endoscopic Retrograde Cholangiopancreatography with Stent Placement – A Case Study and Review of the Literature

Dr John Glover Core Medical Trainee Year 2 Worcestershire Royal Hospital

Case

A 57 year old woman presented with painless obstructive jaundice. Bloods revealed cholestasis and a subsequent CT thorax, abdomen and pelvis demonstrated a 40mm pancreatic head malignancy with liver metastasis. She then underwent endoscopic retrograde cholangiopancreatography (ERCP) which confirmed a 2cm irregular stricture with upstream dilatation. A metal stent measuring 8cm in length was deployed. Brush cytology confirmed adenocarcinoma.

Three days later she re-presented with severe epigastric and right upper quadrant pain. There was peritonism in these areas and Murphy's sign was positive. Her LFTs were static however her CRP was 549mg/L and white cell count was 13.8 $x10^9$/L. Intravenous piperacillin-tazobactam was commenced and blood cultures later grew *E Coli* sensitive to penicillin. An abdominal CT demonstrated free fluid surrounding the gallbladder but contained within the hepatic parenchyma, thought to represent a biloma.

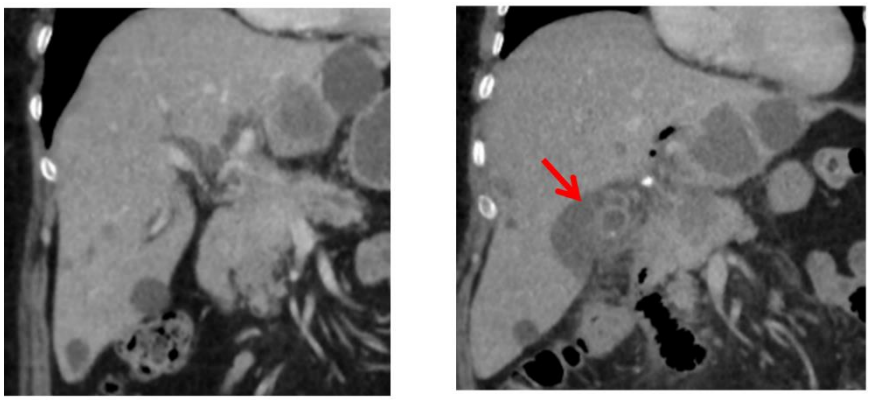

Figure 1: CT scan before (left) and after (right) ERCP showing biloma development around the gallbladder (highlighted)

She was successfully managed with IV antibiotics and was then was referred for palliative chemotherapy.

Discussion

This case presents the unusual case of a probable infected biloma complicating ERCP with stent placement for pancreatic malignancy. A biloma is an encapsulated extra-biliary collection of bile that occurs following bile duct disruption and extravasation of bile into the hepatic parenchyma or the abdominal cavity. They can occur following biliary surgery such as laparoscopic cholecystectomy, and also following abdominal trauma, liver biopsy and very rarely due to spontaneous bile duct perforation. It is a rare complication of ERCP that may be caused by injury to the liver or pancreatic parenchyma by the guidewire or stent[1] or due to bile leak induced by high pressure injection of contrast[2][3]. Only a handful of cases

have been reported in the literature. Such patients may present with biliary peritonism, which should not be ignored post ERCP.

References (100 words)

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Poster 8

Review of the Investigation, Diagnosis and Management of Coeliac Disease in a University Hospital

Fraser Brown Gastroenterology Specialty Trainee University Hospital of North Durham

F. Brown, B. Nelson, F. P. Perez, D. Kejariwal, P. Barrett, A. Munro

University Hospital of North Durham, 2018

Aim

The British Society of Gastroenterology provides recommendations in their guideline document for investigating, diagnosing and managing coeliac disease(1).

The aim of this project is to review current practice when investigating and diagnosing coeliac disease against these recommendations.

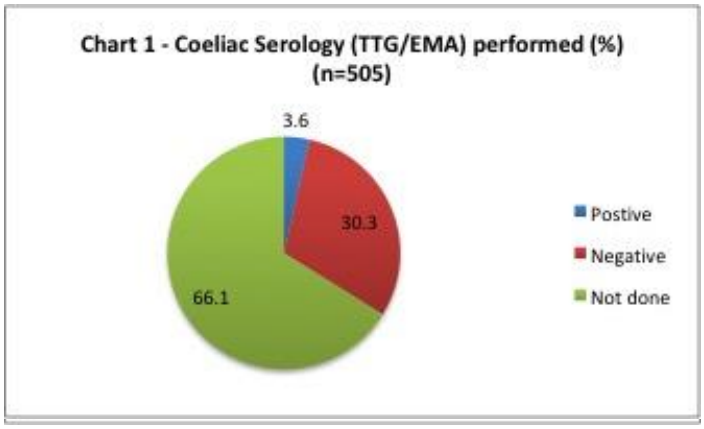
Methods

Data was collected on 505 patients who had undergone duodenal biopsy between November 2016 and February 2017.

Information was collected from endoscopy reports and trust pathology database on endoscopic indications, serological markers and histology results and analysed using Microsoft excel

Results

53% of referrals were for anaemia and 20% performed for weight loss. A further 20% of endoscopies were performed for a variety reasons that did not consistently resemble classical or non-classical coeliac symptoms. A main finding was only 33.9% of patients had any coeliac serology performed (Chart 1). 13% of those who had serology performed returned a positive TTG or EMA. All patients with negative serology had negative coeliac histology. Only 49% of subjects had the recommended minimum four biopsies. However, the 20 patients specifically referred to exclude active coeliac disease had advised number of biopsies (Chart 2). 100% of new patients referred for investigation were on a gluten containing diet.



Conclusion

Our data demonstrates adherence to BSG guidance could be better – the referral indication was inconsistent, the majority of patients had no serology performed and half did not have minimum biopsy numbers(1). This suggests that the diagnostic suspicion before endoscopy was either low or not considered, particularly with all patients with negative serology yielding negative biopsy results. Our results indicate that when patients had classical symptoms of coeliac disease or positive serology, they had the minimum number of biopsies more often with potentially higher diagnostic yield in those subjects(1). Further study could establish cost-effectiveness of duodenal biopsy when investigating upper GI disorders with low suspicion of malabsorption.

References (28 words + 33 words for title and authors)

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Poster 9

An unusual case of Hypercalcaemia in an Elderly lady

Dr. Shiveta Kaul Mattoo DNB Resident Max Hospital, Saket, New Delhi, India

An Unusual Case of Licorice Induced Hypokalemia with Muscle weakness

Long term licorice ingestion is a well-known cause of secondary hypertension and hypokalemia. Nevertheless, its initial presentation with very severe hypokalemia is exceedingly rare. An elderly Indian (Asian) male presented in emergency department with severe muscle weakness. His blood pressure was 140/85 mmHg. His neurological examination revealed muscle power of 4/5 in right upper and lower limbs. His brain scan was normal. The major biochemical abnormalities were hypokalemia (1.7 mmol/L) and metabolic alkalosis (Bicarbonate - 40 mmol/L). His renal Potassium excretion was high (Trans Tubular Potassium Gradient TTKG - 9.8). Plasma renin activity and cortisol levels were normal, but aldosterone level was suppressed and urinary potassium to creatinine ratio was high.

A detailed history revealed that he had ingested licorice daily since few years for his chronic constipation. Even after discontinuing licorice consumption, renal potassium wasting and hypertension persisted for next two weeks.

Long term licorice ingestion should be kept in mind as a cause of severe muscle weakness with an extreme degree of hypokalemia to avoid missing this recognizable and curable medical disorder.

The purpose of this case report is twofold; first to describe the pathophysiological effects of GA (glycyrrhizic acid), which is present in licorice and results in severe hypokalemia, muscles weakness and potential dysrhythmias and secondly to reiterate the importance of a complete and detailed history.

References (100 words)

1. Akkas Camkurt Meltem, Coskun Figen, Metin Aksu Nalan, Kunt Mahir, Bozkurt Sebnem, Isildak Mehlika, Kilic Ahmet Kasim, Bayraktar Miyase. A hypokalemic muscular weakness after licorice ingestion: a case report. Cases J. 2009; 2: 8053. Published online 2009 Sep 17. doi: 10.4076/1757-1626-2-8053

2. Robin de Putter, Jan Donck; Low-dose liquorice ingestion resulting in severe hypokalaemic paraparesis, rhabdomyolysis and nephrogenic diabetes insipidus, *Clinical Kidney Journal*, Volume 7, Issue 1, 1 February 2014, Pages 73–75, https://doi.org/10.1093/ckj/sft159

Poster 10

An Unusual Case of Licorice Induced Hypokalemia with Muscle Weakness

Dr. Shiveta Kaul Mattoo, DNB Resident, Max Hospital, Saket, New Delhi, India

Long term licorice ingestion is a well-known cause of secondary hypertension and hypokalemia. Nevertheless, its initial presentation with very severe hypokalemia is exceedingly rare. An elderly Indian (Asian) male presented in emergency department with severe muscle weakness. His blood pressure was 140/85 mmHg. His neurological examination revealed muscle power of 4/5 in right upper and lower limbs. His brain scan was normal. The major biochemical abnormalities were hypokalemia (1.7 mmol/L) and metabolic alkalosis (Bicarbonate - 40 mmol/L). His renal Potassium excretion was high (Trans Tubular Potassium Gradient TTKG - 9.8). Plasma renin activity and cortisol levels were normal, but aldosterone level was suppressed and urinary potassium to creatinine ratio was high.

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References (100 words)

1. Akkas Camkurt Meltem, Coskun Figen, Metin Aksu Nalan, Kunt Mahir, Bozkurt Sebnem, Isildak Mehlika, Kilic Ahmet Kasim, Bayraktar Miyase. A hypokalemic muscular weakness after licorice ingestion: a case report. Cases J. 2009; 2: 8053. Published online 2009 Sep 17. doi: 10.4076/1757-1626-2-8053

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Poster 11
Dengue Encephalopathy: A Growing Menace

NEED INFO FOR

Dengue Encephalopathy: A Growing Menace	Rajeev	Upreti	Senior resident

Poster 12
The confused thrombocytopenic patient on the acute medical take

Drs Jack Arnold, Oliver Lomas, Amanda Cabandugama, Alexander Gorrie & Helen Eagleton, CT2 Doctors, Stoke Mandeville Hospital

Poster presentation of a patient with thrombotic thrombocytopenic purpura (TTP) who presented to the acute medical take at Stoke Mandeville hospital in 2017. TTP is a relatively rare disorder but an important diagnosis to be made at the front door of the hospital as it requires urgent assessment and treatment.

TTP is characterised by a classical pentad although less than 10% of cases exhibit all 5 aspects. Our patient presented with confusion, renal impairment, microangiopathic haemolytic anaemia and thrombocytopenia. It is an important differential diagnosis to consider alongside Immune thrombocytopenic purpura and disseminated intravascular coagulation in patients with single figure platelet counts at the front door.

Untreated TTP has a 90% mortality. This falls to 10-20% if treated with plasma exchange within 24 hours.

This poster outlines this case in detail, the importance of urgent recognition and treatment along with the initial workup of patients with severe thrombocytopenia on the acute take.

In this case there were several learning points. This case was presented at the local grand round in order to improve awareness within the medical teams participating in the medical take.

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Poster 13

Euglycaemic DKA and SGLT2 Inhibitors: A Case Presentation

Foundation Year 1 Doctor Leicester Royal Infirmary

Case details

We present a case of a 49 year old woman presenting to the emergency department with a three day history of diarrhoea and vomiting and 24 hours of malaise and confusion. She had a background of type 2 diabetes controlled with oral therapies including empagliflozin, an SGLT2 inhibitor. On admission her capillary blood glucose was measured as 12.4 mmol/L, a level low enough normally to exclude diabetic ketoacidosis or hyperosmolar hyperglycaemic state as a cause of her symptoms. However a venous blood gas showed her blood pH to be 6.903, with a base excess of -27.9 mEq/L and bicarbonate of 7.2 mmol/L. As a result her blood ketones levels were tested and found to be elevated at 6.8 mmol/L.
She was treated in the intensive care unit with a fixed rate insulin infusion and recovered well before being discharged with a newly started insulin regime and her empagliflozin ceased.

Background

SGLT2 inhibitors are an increasingly popular therapeutic option for glycaemic control in type 2 diabetes. An unusual but highly significant side effect of these agents is diabetic ketoacidosis with normal or near-normal blood glucose levels (1). The mechanism by which this occurs in not fully understood but may be related to the action of SGLT2 inhibitors in the renal tubules being entirely independent of endogenous insulin (2), unlike all other oral hypoglycaemic agents which either increase endogenous insulin production or increase peripheral sensitivity to it.
This case highlights the potential severity of this side effect and the need for both patients and clinicians to be aware of the potential for ketoacidosis when treated with SGLT2 inhibitors, even when the classic finding of a markedly elevated blood glucose is not present.

References (100 words)

(1) Medicines and Healthcare products Regulatory Agency. *SGLT2 inhibitors: updated advice on the risk of diabetic ketoacidosis*. Available from https://www.gov.uk/drug-safety-update/sglt2-inhibitors-updated-advice-on-the-risk-of-diabetic-ketoacidosis [Accessd 29th July 2018]

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Poster 14

“Fever to Tell”, an unusual cause of pyrexia in a 70-year-old female

Moe Su San, Core medical trainee, St Mary Hospital, Isle of Wight

Aim

Pyrexia of unknown origin is a common presentation. Large vessel vasculitis is an unusual cause of isolated pyrexia. It can affect any of the large vessels, which includes the aorta and its main branches. Diagnosis can be quite challenging.
Appropriate MDT involvement can aid the diagnostic process.

Case

A 70-year-old lady was admitted with 3 days history of intermittent fever and abdominal pain (travel history- holiday in Somerset with contact of cattle +) .Examination was otherwise unremarkable with Temp 37.8°C, mild generalised abdominal tenderness.
Bloods showed White cell of 15.10 × 109/L, Neutrophils 13.1 × 109/L, platelets 402 × 109/L, Haemoglobin 123 g/L, CRP of 244 mg/L. mildly deranged liver function tests (alkaline phosphatase of 390 IU/L, Alanine transaminase of 62 IU/L, bilirubin of 11), microscopic haematuria on urine dips, otherwise unremarkable clotting screen, renal function and chest x ray.

Patient was therefore treated with intravenous co-amoxiclav for possible biliary source of infection.

Despite spiking temperature, she had unremarkable ultrasound abdomen, no hepatobiliary pathology on CT abdomen and pelvis, negative blood cultures, no evidence of endocarditis on transthoracic echo (done for the microscopic haematuria).

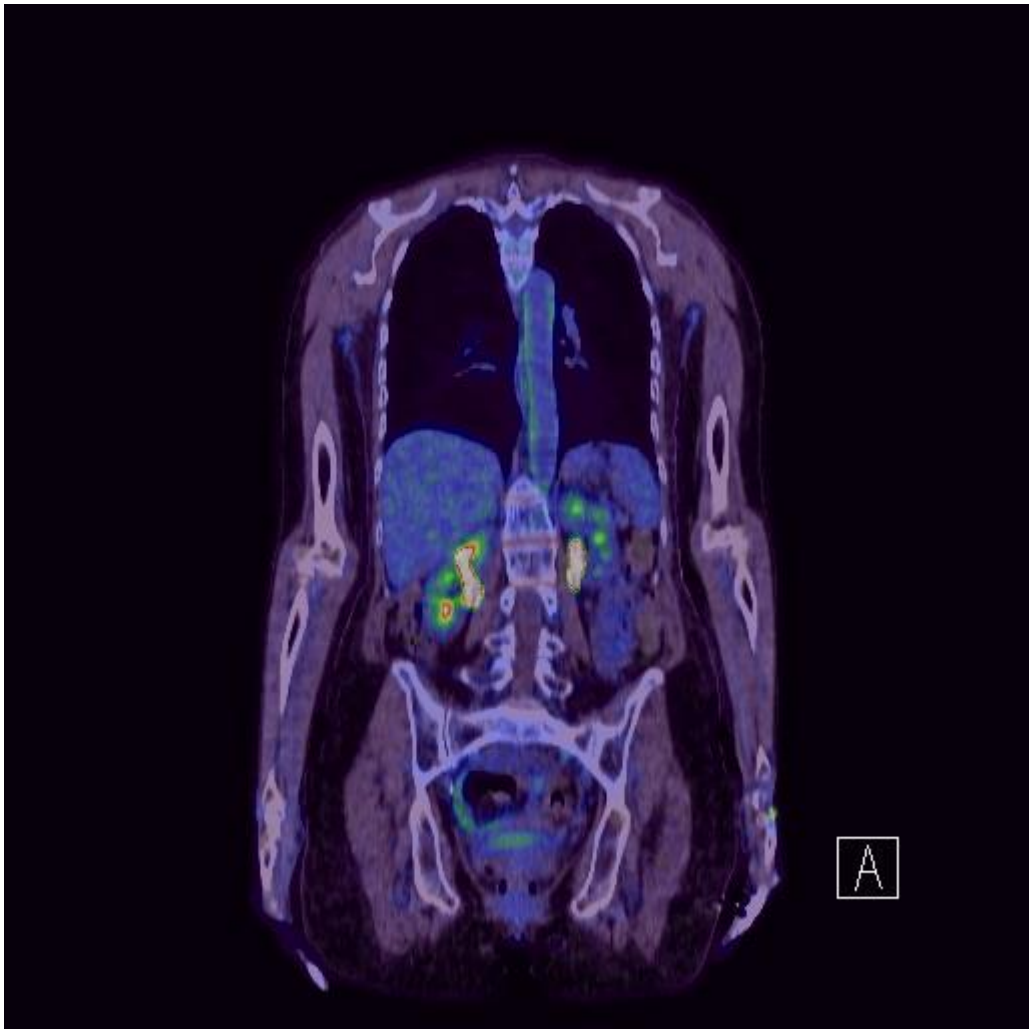
She still have high fever, high inflammatory markers by week two of admission with lack of convincing source of infection, She remained clinically well otherwise. Thus, she was reviewed by the infectious diseases team who advised further blood cultures and screening for HIV, Syphilis, Bartonella, Brucellosis and Lyme disease (in view of her contact with cattle). But all of these came back negative.

The patient had an MRCP (after discussion with gastroenterology) which was normal and a transoesophageal echocardiogram (after a cardiology review), again no evidence of endocarditis. A decision was therefore made for a PET scan to identify the source of infection.

The PET scan demonstrated the Images shown in figures 1 and 2. Patient had a large vessel arteritis, with inflammatory changes affecting the whole aorta. Patient was seen by the rheumatology team and started on high dose steroids with follow up in outpatient clinic.

Conclusion

This case highlight the involvement of MDT in selecting investigation so the correct diagnosis of large vessel vasculitis was made prior to development of any classical clinical manifestation.



PET scan showing inflammation of aorta and its main branches

References (100 words)

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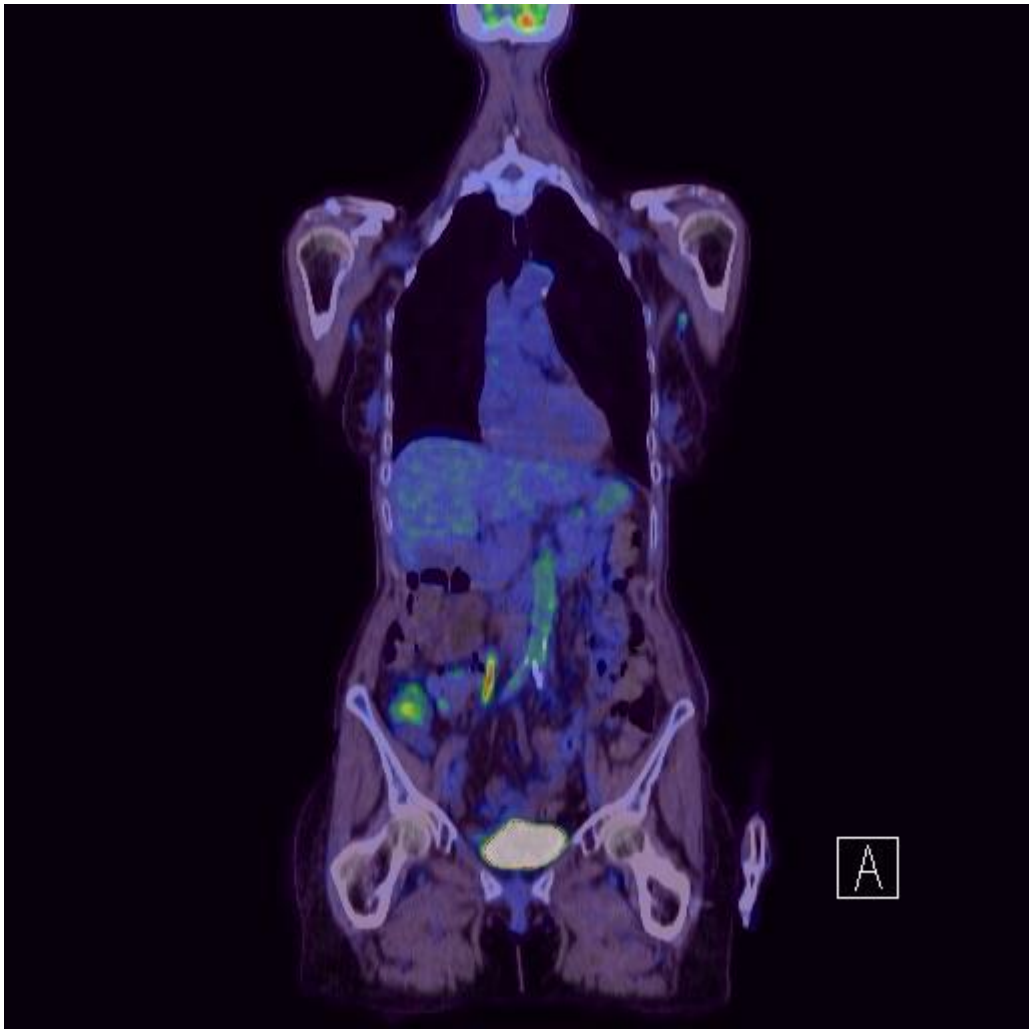
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Poster 15

Wild-type ATTR amyloidosis- A rare presentation

Dr Muhammad Usama Aslam, Dr Mehreen Mudassar
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Introduction

Amyloidosis is a rare disease caused by abnormal deposition of proteins in the tissues of the body. We present a case of obstructive jaundice and fluid overload which was diagnosed with wild type ATTR amyloidosis.

Case

77 years old gentleman presented with a mechanical fall. He also had yellowish discoloration of eyes and skin with generalized body swelling. Examinations showed slow irregular pulse with peripheral and central signs of fluid overload.

Normal FBC, urea & electrolyte and bone profile. Liver tests showed bilirubin 115 umol/L, albumin 34g/L, alkaline phosphatase 400 U/L, alanine transaminase 48 U/L, aspartate transaminase 38 U/L and gamma glutamate transaminase of 192 U/L which were deranged from last 5 months. Coagulation profile was normal.Viral hepatitis screen, liver autoantibodies, extractable nuclear antigen antibody and double stranded DNA antibody, alpha-1 antitrypsin and serum ceruloplasmin was negative although anti-nuclear antibody was positive (titer 1:1280). Immunoglobulin levels, IgM 2.86(high). Serum ferritin and transferrin saturation was normal. NT-pro BNP 2702 ng/L and troponin T 64 ng/L. Serum protein electrophoresis showed monoclonal paraproteins spike (IgM type), positive urinary bence jones proteins, normal urine protein:creatinine ratio with elevated kappa light chains 72.8, lamba light chains 39.10 and kappa:Lambda ration of 1.86. Bone marrow biopsy showed 6% plasma cells.

CT scan showed cholelithiasis, mild intrahepatic biliary duct dilatation with irregular hepatic contours. MRCP showed normal biliary and pancreatic tree. ECHO showed evidence of biventriculary hypertrophy with normal LVEF and sparkling myocardial appearance suspicious of amyoloidosis. ECG showed small QRS complexes in limb leads with pseudo infarct in chest leads.

Rectal biopsy showed amyloid deposits. Immunohistochemistry showed amyloid of transthyretin type. Serum amyloid P component scintigraphy didn't show any visceral amyloid deposits. 99mTc-DPD scintigraphy showed perugini grade 2 abnormal cardiac uptake. TTR gene sequencing showed ATTR to be of wild type.

Patient was referred to National amyloidosis Center in London for review and was advised symptomatic management.

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Poster 16

Making Advance Care Planning and Integral Part of Hospital Practice; Quality Improvement at Barnet Hospital

Anna Steel, SpR in Geriatrics and General Internal Medicine, Barnet Hospital

Steel A, Owen L, Shama S, Pleming J, Benafif A, Pervaiz A, Isch-Horowicz T, Newman N, Sivarajah S,

Aim

Many elderly people are currently dying in hospital despite preferring to be at home. We observed all hospital deaths over a month. These patients were mostly frail (Rockwood frailty score 6-9), predictable and admission could have potentially been avoided. Most patients however did not have an advance care plan (ACP). We assessed which patients on the elderly care wards would be suitable for ACP and introduced interventions to increase the use of ACP in our practice.

Methods

We retrospectively reviewed the hospital deaths from September 2017 to assess how many had ACPs and how their outcomes may have differed if these had been in place. We initiated a pilot study on one ward. Interventions included educational events, daily board rounds highlighting which patients needed ACPs, posters and “advance care plan” sticky labels for notes. Following encouraging results, the interventions were rolled out and prospectively followed up over 6 Geriatric wards.

Results

Approximately 50% of patients on each ward were appropriate to have an ACP. Each of the Geriatric SpRs on the wards championed ACPs and we continued all our interventions. Baseline data showed overall ~20% of patients who required ACP had one started. This improved to ~80% across the wards post interventions. The hospital IT system will now also incorporate ACPs into medical notes and discharge summaries to maintain practice.

Conclusions

ACPs have become an essential part of our daily rounds. A widespread change in practice is achievable with the right interventions. Education is most essential in order to equip staff with the skills and confidence to have these conversations. Communication with the community teams is crucial. We have improved our practice nearly 4 fold in Barnet Elderly Care wards and the next step will be to make ACPs everyday practice for all specialties.

Poster 17

Hospital@NightVision - Improving Transparency in Medical Handover ST3 Respiratory

Denise McKeegan, Daisy Hill Hospital, Newry, Northern Ireland

Submission

Handover is the system by which immediate and ongoing patient care is transferred between healthcare professionals. Handover failure has been identified by the Royal College of Physicians (RCP) as a major, preventable cause of patient harm.[1]

AIM

The prevailing handover practice in our hospital was quite informal with the handover of many tasks and patient reviews taking place as an oral handover only. We decided to undertake this project, the aim of which was to formalise the evening handover and introduce improved practices in line with RCP guidance.[2]

METHODS

We collated the opinions of clinical team members by carrying out an anonymous questionnaire looking at current handover procedure. We hoped that this would provide us a clear mandate for bringing in changes to the evening handover meeting. The anonymous questionnaire was sent out to all physicians. After 6 months, a repeat questionnaire was sent to the same group. Qualitative responses were collated into the results into 'Who? What? When? Why? Where?' groups for analysis.

OUTCOMES

A series of recommendations were made based on the initial responses to the survey. These included the introduction of good handover etiquette with printed 'rules' on clear display in the handover room, an induction for all new doctors at changeover and the introduction of a standardised handover proforma to be filled in with copies stored for audit purposes. Responses to the repeat questionnaire showed an increase of 20% in the number of doctors who felt adequately prepared for the shift ahead following the introduction of "Handover Rules" posters and the handover proforma.

CONCLUSION

Introduction of a written handover record sheet, "Handover Rules" posters and education of medical staff have gone a long way towards improving handover safety, efficiency and traceability. This has had a significant impact on staff morale and, more importantly, patient safety

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1. Royal College of Physicians. A scoping project: Handover – the need and the best practice. 20 May 2010.
2. Royal College of Physicians. Acute Care Toolkit 1 – Handover. https://www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-1-handover

Poster 18

Feeling the Squeeze - Audit of Survival Outcomes in patients receiving inotropes, within a medically run High Dependency Unit

Dr Aileen Murray, Staff Grade
High Dependency Unit, Daisy Hill Hospital, Newry, Northern Ireland

Background

Inotropes are potent drugs whose use is confined to the critically ill patient in physiological shock. 'Shocked' patients' are unfortunately relatively common, and this final common pathway is the result of regularly encountered emergencies.

Aim

Our Audit aimed to assess survival outcomes of patients who received inotropes, in our Medically run High Dependency Unit, (HDU) over a six month period.
We aimed to assess survival following this treatment, for patients who some of which, were deemed not appropriate for level 3 Care. Patients were managed in HDU, with some, subsequently requiring transfer to the Intensive Care Unit.

Method

300 HDU patients were identified, and those who received inotropes selected.
We used the Modified Rankin system for functional baseline, and used the electronic care record (ECR) as our data bank focusing on this and age.

Results

- 16/300 patients required inotropic support
- 56% of these survived to at least 2 years
- Of the 44% that died – all were aged over 60
- 8/16 of the patients on intropes required subsequent ICU admission
- Of the 8/16 managed in HDU and not transferred to ICU – 50% survived to at least 2 years following discharge
- 50% of the surviving patients were over 80 years of age with a Modified Rankin 0 - 4

Conclusion

In our aging population, the decision to commence inotropic support for critical illness will always remain challenging.
We sampled a small cohort of patients, receiving inotropes in a **Medically** run HDU.
Although the survival rates are poorer with increasing age, we have shown a 50% survival rate, often managing frailer patients, who are deemed not appropriate for level 3 care.
It appears that by getting this cohort over their acute illness, they can survive longer. *What is the future of critical care in the elderly?*

Poster 19

‘Feed yourself not the parasite’. Ancylostoma Duodenale infestation as cause of Iron Deficiency Anaemia

Ayesha Abdulla ALMarzooqi, Medical Resident
Waqar Gaba, Consultant Physician

INTRODUCTION:

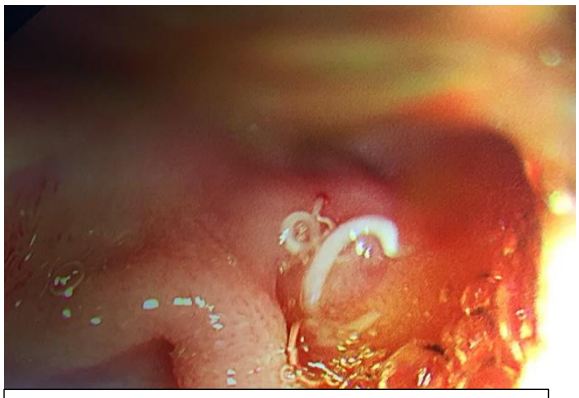
Hookworms are one of the most common human parasites in the world causing intestinal infestation. We present an unusual case of iron deficiency anemia in whom Ancylostoma Duodenale, one of the hookworms was found live on Oesophagogastroduodenoscopy(OGD).

CASE REPORT:

A 30-year-old Pakistani gentleman presented to our acute medical unit with syncope at work. He reported lethargy, weight loss of 4 kg and dark stools for the last two months. He worked as mason with no significant past medical history and no regular medications. On examination he was found to be pale though normotensive with unremarkable physical examination. Bloods revealed severe microcytic anemia with Hb of 34 g/L, MCV of 56.7fL, Eosinophils of 1.97x10^9/L with rest of bloods all normal. He was given 4 units of blood transfusion. Gastroenterology team was involved for urgent OGD, which identified the presence of several live and motile worms less than 1cm in length with buccal capsule and two pairs of curved teeth of in the duodenum at level D2 with moving worms, typical of Ancylostoma Duodenale (Picture A). Stool for ova, cyst and parasites was positive for hookworm infection. He was treated with albendazole 400mg once and discharged with repeat hemoglobin level on follow up. He was given instructions to prevent the future infections including importance of proper hygiene. Advice regarding deworming therapy for his family members and others at risk was given.

DISCUSSION:

Ancylostoma Duodenale is one of the most common parasites in the world. It is a common cause of occult gastrointestinal bleed and anemia which is often overlooked. It’s mostly transmitted through feco-oral route. Duodenum is the most common site where it can be localized. Parasitic infestation should be considered in patients with iron deficiency anemia and unexplained gastrointestinal blood loss. Endoscopists should inspect stomach and small bowel mucosa for unsuspected parasitic infestation.



Picture A. Ancylostoma Duodenale

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Poster 20

Improving the Safe Discharge of Patients taking Warfarin

Anna Victoria Dunnigan, Foundation Year Doctor, Milton Keynes University Hospital (until 31st July 2018) then Churchill Hospital, Oxford (from 1st August 2018)

Dr Anna Dunnigan, Mr Matthew Burnett, Dr Sarah Davis
Milton Keynes University Hospital, Standing Way, Eaglestone, Milton Keynes

Aim

To assess the information provided on discharge summaries regarding warfarin, and to design relevant improvements.

Methods

Three audit cycles were conducted across 2017-2018. 20 discharge summaries were randomly sampled per cycle to assess whether Trust Standards for discharge documentation of warfarin were being met (8 standards – see Appendix A). Targeted measures were implemented after cycle 1 (educational sessions, emails and posters) and after cycle 2 (improved discharge summary format).

Outcomes/Results

Cycle 1 identified multiple areas for improvement. After initial measures, improvements were noted particularly in documenting inpatient warfarin doses (70% from 40%), as well as in documenting doses until the neck INR check (90% from 70%) and the plan for the next INR check (75% from 65%). After cycle 2, the discharge summary was reformatted to contain additional fields for required information. Major improvements were seen, with documentation of six standards (indication, intended duration, discharge INR, new vs continued medication, dosing regime and plan for the next INR) in 100% of cases. Despite initial improvement, inpatient dose documentation decreased in cycle 3 (40%). We attribute this to current absence of a specific field for this in the discharge summary.

Conclusions

Re-formatting the warfarin prescription section in the discharge summary has generated marked improvements. Discussions are underway regarding introduction of a specific field for inpatient warfarin doses.

Results table:

Documentation on discharge summary	**Cycle 1**		**Cycle 2**		**Cycle 3**	
Indication for anticoagulation	7/20	35%	6/20	30%	20/20	100%
Intended duration	4/20	20%	4/20	20%	20/20	100%
New or continued medication	20/20	100%	20/20	100%	20/20	100%
Target INR	20/20	100%	20/20	100%	19/20	95%
Last three warfarin doses	8/20	40%	14/20	70%	8/20	40%
Discharge INR	19/20	95%	18/20	90%	20/20	100%
Doses until next INR check	14/20	70%	18/20	90%	20/20	100%
Plan for next INR check including date	13/20	65%	15/20	75%	20/20	100%

Appendix A

The Oral Anticoagulation Guidelines for Milton Keynes Hospital NHS Foundation Trust sets the following standards for discharge documentation of anti-coagulation:

- Indication
- Previous user or new user of warfarin
- Intended duration of treatment
- Target INR
- At least 3 previous warfarin doses documented
- Discharge INR
- Doses of warfarin until the next INR check
- Plan for the next INR check

Poster 21

Increasing the Use FAST HUG Mnemonic: A Quality Improvement Initiative in a Medical Intensive Care Unit

Jenny Yi Chen Hsieh, Senior Resident, Changi General Hospital, Singapore

Jenny Yi Chen Hsieh, Trina Arifin, Siti Shafia Bte Yang Razali, and Roshni Sadashiv Gokhale, Department of General Medicine, Changi General Hospital, Singapore

Aim

The FAST HUG mnemonic (Feeding, Analgesia, Sedation, Thromboembolic prophylaxis, Head-of-bed elevation, stress Ulcer prevention, and Glucose control) has been an important tool that aid the review of key aspects in the management of patients in the intensive care unit[1]. The use of this mnemonic has shown to improve the quality of care in the intensive care setting[2].

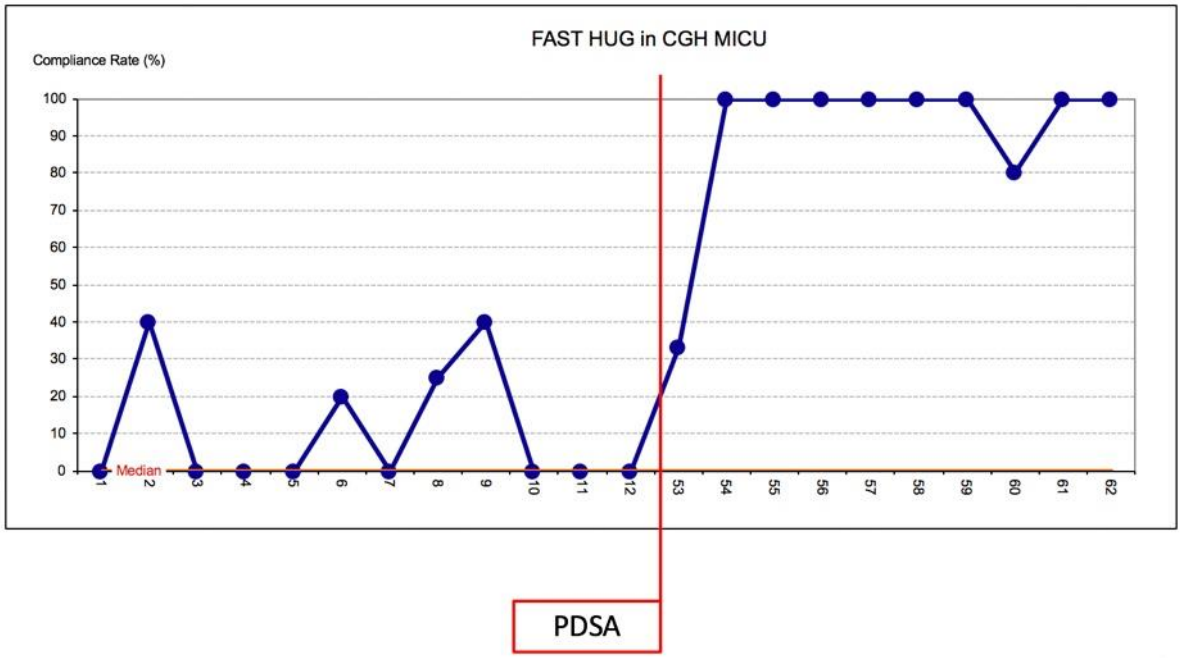
The aim of this quality improvement (QI) initiative is to improve the usage of all components of FAST HUG mnemonic during daily ward rounds for medical intensive care unit (MICU) patients at Changi General Hospital (CGH).

Methods

A multidisciplinary analysis of the existing CGH MICU rounding charts was undertaken. A new rounding sheet which incorporated a check list of the FAST HUG mnemonic into daily morning rounds was designed, tested and altered using a quality improvement or Plan-Do-Study-Act (PDSA) cycle. The compliance rate of using the FAST HUG mnemonic in the medical records of MICU patients was measured.

Results

Analysis of pre-PDSA medical records showed overall mean compliance rate to FAST HUG mnemonic was 11.54%. After the introduction of the new PDSA rounding sheets, overall compliance rate improved to only 33.33% for the first week. We identified that several MICU physicians were unaware of the introduction of the new rounding sheets, hence a briefing session was conducted at the end of week 1. After which, the overall mean compliance rate improved to 97.77%.



Conclusions

Our quality improvement initiative has achieved an increase in compliance rate with the use of the FAST HUG mnemonic during rounds. The use of this mnemonic has been demonstrated in multiple studies to decrease the risk of complications, morbidity and mortalities in critically ill patients. Thus, with the improved compliance rates, we expect an improvement in the outcomes for our critically ill patients.

References (100 words)

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