Tuesday Morning 10:30 -12:00

Contents

Poster 1 Two cases of Cardiac Sarcoid identified on MRI or PET-CT .......................................................... 3
Poster 2 Quality Improvement Through Introduction of Lumbar Puncture Bundle In AMU. ................. 5
Poster 3 Measuring ‘True admission avoidance’ in ambulatory care................................................................. 9
Poster 4 Getting your drug addicted patients change ready by patient participation in quantitating their strongly motivational desire for the human rights they have lost...................................................... 11
Poster 5 A case report of cerebral empyema, and its sequelae, presenting as a hyperacute stroke mimic........................................................................................................................................... 12
Poster 6 An audit of our use of X-ray imaging in acute atraumatic back pain........................................... 14
Poster 7 Audit on management of patients at high risk of Carbapenemase Producing Enterobacteriaceae (CPE). Are we ready? ......................................................................................................................... 16
Poster 8 An unfortunate artist - a case of Proton Pump Inhibitor-induced hypomagnesaemia............ 18
Poster 9 Subjective and objective differences in estimates of daytime sleepiness using the Epworth Sleepiness Scale according to gender in patients with sleep disordered breathing: Possible implications for ability to drive safely............................................................. 20
Poster 10 May-Thurner Syndrome: An underappreciated cause for DVT ................................................ 23
Poster 11 The use of capnography during in-hospital cardiac arrests in non-specialist areas: A clinical audit performed at a district general hospital................................................................. 24
Poster 12 Patterns of stroke in people with atrial fibrillation admitted to hospital .............................. 26
Poster 13 Are hospitals providing accommodation for tired on-call doctors? ....................................... 27
Poster 14 The need for efficient Handover: Improving handover at BNH.............................................. 28
Poster 15 To establish how accurately CAP is diagnosed in hospital and whether CAPs are followed-up appropriately after discharge. To improve patient safety................................................................. 30
Poster 16 Impact of an Acute Oncology Service (AOS) at 2 District General Hospitals ..................... 32
Poster 17 Listen to your patient, he is telling you the diagnosis ................................................................. 34
Poster 18 HIV Testing on the Medical Admissions Unit (MAU) in 3 hospitals in the South West of England.............................................................................................................................................. 37
Poster 19 A rare cardiac complication of intravenous drug use................................................................. 38
Poster 21  Reducing time to endoscopy from suspected colorectal cancer GP referrals to ensure compliance with the 62-day cancer pathway

Poster 22  Timely Transfer of Acute Ischaemic Stroke patient from Emergency Department for Mechanical Thrombectomy to a Neuroscience Centre: Norfolk experience with Helicopter transfer

Poster 23  Emergency Department Procedural Sedation Practice in Adults

Poster 24  Unusual presentation of Chest Pain

Poster 25  TNF-Antagonist Induced Demyelination

Poster 26  Making an impression: The four wheeled walker user with chronic skin changes

Poster 27  Improving the initial response to critically ill patients on the ward: an interprofessional learning initiative

Poster 28  Medicine reconciliation within the short stay unit

Poster 29  A case of Stevens-Johnson Syndrome following pneumonia

Poster 30  An Audit on the Management of Urticaria
Aim:
Sarcoidosis is a multisystemic non-caseating granulomatous disorder of unknown aetiology. Clinical manifestations of cardiac sarcoidosis vary depending on the location and extent of granulomatous inflammation. It can occur insidiously, present with conduction abnormalities, heart failure or sudden cardiac death.

For these reasons cardiac sarcoidosis remains a diagnostic challenge. Diagnosis relies on Positron Emission Tomography – Computed Tomography (PET-CT), cardiac Magnetic Resonance Imaging (MRI), or histopathology. This poster compares two cases of cardiac sarcoid identified on cardiac MRI and PET-CT in patients with known sarcoidosis.

Method:
Case one is a 48 year old female with pulmonary sarcoid, who presented with a new rash and a vague history of unexplained arrhythmias. She underwent a PET-CT scan, which demonstrated focal diffuse uptake within the myocardium (figure one). This was in keeping with active myocarditis secondary to sarcoidosis. There were no features identified on her cardiac MRI.

Case two is a 56 year old female with lupus and sarcoid overlap. She presented with weight loss and breathlessness with a dramatic troponin and BNP rise. PET-CT findings were non-specific, however cardiac MRI found focal epicardial fibrosis in the basal anterolateral wall with mild pericardial thickening. This was suggestive of current or recent pericarditis, most likely secondary due to sarcoid myocarditis.

Discussion
Cardiac sarcoid remains a rare occurrence but accounts for up to 25% of sarcoidosis related mortality and has been shown to be an important prognostic indicator. 25-65% of cases of sudden death in patients with cardiac sarcoid are due to ventricular tachyarrhythmias or conduction block.

The majority of cardiac investigations such as ECG and echocardiogram have non-specific findings. Therefore it has been suggested that the combined use of both imaging modalities would lead to earlier accurate diagnosis.
Figure 1 - PET-CT demonstrating diffuse myocardial uptake

References


Aim:
Lumbar punctures (LPs) are commonly performed on the Acute Medical Unit (AMU). As it is an invasive procedure, care must be taken to ensure the procedure is technically correct, cerebrospinal fluid (CSF) samples sent for the appropriate diagnostic reasons first time and the processing of the CSF samples streamlined to avoid delays in cases of suspected subarachnoid haemorrhage (SAH).

A trust wide audit was performed in 2011 where 60 patients were evaluated for documentation of procedure and complications arising form performing the LP and analysis of samples. The main conclusion of the audit was the poor documentation of procedure which includes verbal consent, use of analgesia and blood results. Insufficient samples were sent for analysis of xanthochromia to exclude SAH.

This audit suggested an action plan to develop xanthochromia packs by 2012. After initial promise the use xanthochromia pack decreased. Level 3 incident put forth in July 2014. Investigation led to full rewrite of trust LP procedure. On the back of this collection packs were successfully reintroduce, accompanied by ward side quality improvement including the procedure room and LP stickers. A Re audit was performed in July 2016 to evaluate current practices in technical aspects of performing LPs, documentation of the procedure but also evaluate the Lab aspects of sample handling and processing. Overall we found significant improvement in all aspects of LP.

Method:
LP Bundle was introduced and improvement in service quality was compared using audit tool. Two audit tools were set side by side and confirmed the refinement of service quality using simple LP bundle.

LP Bundle includes Xanthochromia kit, Separate Procedure room in AMU and LP sticker.

Results:

<table>
<thead>
<tr>
<th>Standards</th>
<th>2016 Audit Compliance (%)</th>
<th>2011 Audit Compliance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>All patients should have the indication for LP documented</td>
<td>97%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
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</tr>
<tr>
<td><strong>C2</strong></td>
<td>All patients should be consented (ideally written) for procedure</td>
<td>91% 63%</td>
</tr>
<tr>
<td><strong>C3</strong></td>
<td>The number of attempts per patients’ should be documented</td>
<td>89% 60%</td>
</tr>
<tr>
<td><strong>C4</strong></td>
<td>Any complications with the procedure should be documented in all cases</td>
<td>80% 100%</td>
</tr>
<tr>
<td><strong>C5</strong></td>
<td>The volume of local anaesthetic administered should be documented</td>
<td>81% 48%</td>
</tr>
<tr>
<td><strong>C6</strong></td>
<td>All patients undergoing LP should have manometry if deemed appropriate</td>
<td>99% 50%</td>
</tr>
<tr>
<td><strong>C7</strong></td>
<td>All patients who have manometry should have measurement of this documented</td>
<td>98% 100%</td>
</tr>
<tr>
<td><strong>C8</strong></td>
<td>The LP procedure should be documented in all cases</td>
<td>97% NA</td>
</tr>
<tr>
<td><strong>C9</strong></td>
<td>The grade of doctor should be documented in all cases</td>
<td>96% NA</td>
</tr>
</tbody>
</table>

**Laboratory:**

<p>| | | |</p>
<table>
<thead>
<tr>
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<th></th>
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</thead>
</table>
| **L1** | CSF biochemistry should be sent in appropriate cases:  
   a) Glucose  
   b) LFTs  
   c) Xanthochromia | 91% 91% 98% 100% 62% 77% |
| **L2** | CSF microbiology should be sent in appropriate cases of suspected Central nervous system infection | 100% 95% |
| L3 | CSF virology should be sent in appropriate cases of suspected Central nervous system infection | 88% | NA |
| L4 | Appropriate blood samples should be collected for the correct interpretation of CSF results interpretation:  
   a) Glucose with non-Xanthochromia LP  
   b) Glucose with Xanthochromia LP  
   c) LFTs with Xanthochromia LP | 93%  
   88%  
   85% | NA  
   62%  
   62% |
| L5 | CSF for xanthochromia (if appropriate) should be sent using correct LP kit | 97% | NA |
| L6 | CSF collected for the investigation of suspected SAH must be collected at least 12h after symptom onset | 100% | NA |
| L7 | For CSF collected for the investigation of suspected SAH the xanthochromia sample must be received protected from light | 100% | NA |
| L8 | For CSF collected for the investigation of suspected SAH, the xanthochromia sample must be received in the lab within 30 minutes of collection | 51% | NA |
For CSF collected for the investigation of suspected SAH, sufficient sample (minimum 1 mL) to allow analysis must be collected.

<p>| | |</p>
<table>
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<tbody>
<tr>
<td>L9</td>
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</tr>
</tbody>
</table>

**Conclusion:**

1. An invasive procedure should be documented comprehensively. Information of the technical aspects of the procedure should also be documented.

2. Introduction of a lumbar puncture sticker which not only acted as safety check list for the operator but also streamlined the documentation of valuable information.

3. LP kits helped smooth-running the processing of samples for xanthochromia in cases SAH. It significantly reduced the incidents where either insufficient samples of CSF were sent or they were unprotected from light.

4. Procedure room has significantly reduced the time required for the procedure.
Poster 3
Measuring ‘True admission avoidance’ in ambulatory care

Ellis, S. Heffernan, C. Basingstoke and North Hampshire Hospital

Aim
Ambulatory Emergency Clinic (AEC) is a recent addition to Basingstoke and North Hampshire Hospital. In January 2017 additional acute medical consultants were appointed to help develop the service. The clinic is consultant led and operates Monday-Friday from 0900-1800. AEC accepts referrals directly from GP’s and operates a push/pull system for ED. Out of hours referrals can be made via the medical registrar on call. Before expanding the service further we studied the true impact of AEC by not only looking at patients diverted from the medical take but also 30-day readmission and mortality rates thereby reflecting ‘true’ admission avoidance.

Method
Data was collected prospectively from January to June 2017. We measured the number of patients diverted from the medical take to AEC and the number of patients who subsequently required admission. Patients were followed up at 30 days to measure readmission rates and mortality rates. True admission avoidance (TAA) was calculated using the following formula:

\[
TAA \% = \frac{\text{(NEW AEC Patients + FOLLOW UP AEC Patients)} - \text{(Same Day AEC Admissions + 30 Day AEC Readmissions})}{\text{Total Medical Referrals}} \times 100
\]

Results
Table 1 shows the monthly breakdown of clinical activity in AEC. Over six months 20.3% of patients were diverted from the medical take to AEC. Of those seen via AEC, 10.7% required hospital admission. The 30-day readmission rate was 2.0% and true admission avoidance was 24.7%.

Conclusion
AEC diverts a significant proportion of the medical take. To study the true impact of AEC; 30-day readmission rates, true admission avoidance and mortality rates should also be measured. Our data suggests AEC can deliver significant true admission avoidance whilst maintaining low readmission and mortality rates. Our service is due to expand further in 2018 and this data provides supporting evidence both in terms of clinical effectiveness and patient safety.
<table>
<thead>
<tr>
<th>MONTHS</th>
<th>% of Medical take diverted to AEC (NEW Patients)</th>
<th>% FOLLOW UP Patients seen in AEC</th>
<th>% of Patients requiring admission from AEC (Same day Admissions)</th>
<th>AEC 30 day Readmission Rate</th>
<th>True Admission Avoidance</th>
<th>Mortality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>JANUARY</td>
<td>19%</td>
<td>8.4%</td>
<td>11.3%</td>
<td>2.1%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>FEBRUARY</td>
<td>19%</td>
<td>6.7%</td>
<td>9.2%</td>
<td>2.5%</td>
<td>21%</td>
<td>0%</td>
</tr>
<tr>
<td>MARCH</td>
<td>23%</td>
<td>13.3%</td>
<td>9.8%</td>
<td>3%</td>
<td>28%</td>
<td>1.10%</td>
</tr>
<tr>
<td>APRIL</td>
<td>19%</td>
<td>15.7%</td>
<td>10.7%</td>
<td>0.5%</td>
<td>23%</td>
<td>0%</td>
</tr>
<tr>
<td>MAY</td>
<td>21%</td>
<td>13.7%</td>
<td>12.6%</td>
<td>2.3%</td>
<td>26%</td>
<td>0%</td>
</tr>
<tr>
<td>JUNE</td>
<td>21%</td>
<td>13.5%</td>
<td>10.3%</td>
<td>1.3%</td>
<td>28%</td>
<td>0%</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>20.3%</td>
<td>11.9%</td>
<td>10.7%</td>
<td>2.0%</td>
<td>24.7%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>
Poster 4
Getting your drug addicted patients change ready by patient participation in quantitating their strongly motivational desire for the human rights they have lost.


Abstract
A simple method of gaining patient participation in restoring their insight capacity and responsibility

Some medical conditions such as drug/alcohol induced brain damage lead to: a) poor decision making ability, b) little or no planning for the future, c) poor ability to change their own behaviour.

To help patients change their behaviour we need firstly their participation in quantitatively assessing their above losses. Discussion with their clinician adds realism to their perceptions and a more accurate joint quantitated diagnosis is agreed upon.

Rehabilitation requires their participation in what they perceive as their strongest desire and ability to change. By applying this method their desires are quantitated. During this quantitation and discussion real evidence supplied by the assessor is added to the patients’ perceptions. This added information gives the patient insight into changing their perceptions and of their ability to change their behaviour and to plan for the future. With this information and insight, they are then able to make their autonomous choice of their informed medical management options.

The focus is on quantitating patients’ perceptions of their human rights losses because human rights are strongly motivational for change. Human rights have evolved from medical and legal ethics into legal rights that most people strongly desire. Indeed, we owe a debt of gratitude to those that have given their lives fighting for us, so that we can benefit from these human rights.

Drug or alcohol addicts, also show a strong desire for these human rights but do not realise how much of their rights they have lost. By their participation, in changing their falsely high perceptions of having these human rights they become highly motivated for change. They often spontaneously express their desire to change and state that they are “change ready” and want to participate in the help available to them.

They now have informed consent and the ability to make their autonomous choice of their medical management options and have been motivated to fully participate.

Results as tables and figures can be presented for many patients.
A case report of cerebral empyema, and its sequelae, presenting as a hyperacute stroke mimic.

Nakajima, M. Moodley, K. Brincat, S. St George’s Hospital London

AIM
Stroke is a common medical emergency. However it can be challenging to diagnose. 20-25% of suspected stroke are ‘stroke mimics’ (1). Intracranial infection, such as subdural empyema, is one. Here we describe a case of subdural empyema with repeated episodes of stroke-like symptoms.

CASE
A 58 year-old male presented to the Emergency Department with four-day history of headache, hemiparesis and expressive aphasia. There was no systemic markers of infection, however, blood test showed a white cell count over 20 and C-reactive protein level over 300. CT head showed a left-sided subdural collection with adjacent brain oedema (Figure 1). He was treated for subdural empyema with ceftriaxone, metronidazole and acyclovir. MRI brain confirmed the empyema, and was surgically drained (Figure 2A). The pus culture grew Streptococcus milleri, confirming the source of infection to be dental caries. Six teeth were extracted. He was discharged after 51 days on two antiepileptic drugs. He was independently mobile with minor right-sided weakness, and mild aphasia.

Subsequently he had two admissions with dysphasia and right hemiparesis: former was a thrombolysis call. MRI head suggested recurrent empyema; however, this was excluded after normal microbiology investigations and normal inflammatory markers (Figure 2B). After the first recurrence, a third anti-epileptic medication, oxcarbazepine was started. After the second recurrence, EEG suggested focal status epilepticus. The dose of oxcarbazepine was increased. Given the absence of infective symptoms and of raised inflammatory markers, the changes on imaging were attributed to uncontrolled seizure activities. He was referred to community neuro-rehabilitation and a neurology outpatient clinic.

CONCLUSION
The case highlights the key learning points: firstly, intracranial infection may mimic stroke; but appropriate imaging and biochemical markers could identify this. Secondly, epilepsy secondary to the empyema should be anticipated, and treated accordingly. Thirdly, the seizures in this epilepsy may develop into non-convulsive focal status epilepticus.

References
Figure 1: CT head. Left-sided subdural collection with adjacent brain oedema, with loss of sulcal definition.

Figure 2: MRI head: (A) FLAIR sequence showing a round occipital lesion of cerebritis. (B) DWI sequence showing restricted diffusion involving the left hemispheric cortex and subcortical white matter.
Background
X-ray imaging should not be used routinely in the imaging of acute atraumatic back pain as it will not inform management(1-3). Imaging (CT or MRI) should be carried out when significant spinal pathology is suspected, and will alter treatment(1-2). The radiation dose of a lumbar spine X-ray is equivalent to 20 chest X-rays and so these examinations are superfluous and harmful(4).

Aim
To audit our use of X-ray imaging in acute atraumatic back pain.

Method
A retrospective review of all atraumatic back pain referrals to the on-call orthopaedic doctor at a district general hospital between 1/5/16 and 14/9/16. An imaging flowchart was then devised and displayed in orthopaedic clinical areas to reduce the number of X-ray examinations carried out. Another retrospective review was then carried out between 1/7/17 and 31/7/17.

Outcomes
Initially, 19.2% of atraumatic back pain referrals underwent X-ray. 80% of these X-ray requests came from the orthopaedic team. 35% of patients undergoing X-ray had red flag symptoms severe enough to warrant inpatient CT or MRI examination. X-ray examination was normal in patients diagnosed with serious spinal pathology. Its only diagnostic use was in detecting osteoporotic crush fracture, but only 15% of patients X-rayed had risk factors for osteoporosis. Following implementation of the flow chart, the percentage of patients being X-rayed decreased to 13.8% (p=0.6 using Fisher’s exact test), and only 25% of the X-ray requests came from the orthopaedic department.

Conclusions
Following implementation of our flowchart, the number of X-ray examinations carried out decreased, reducing pressure on resources and preventing unnecessary irradiation of patients. However, X-rays are still being used in suspected serious spinal pathology when CT/MRI are the modalities of choice.

References


AIM
Stroke thrombolysis is licenced in the UK <4.5 hours from symptom onset, however evidence states that it should be administered as soon as possible from symptoms onset for the greatest benefit [1-3]. National Stroke thrombolysis guidelines reflect this by stating that Door-to-Needle Time (DNT) should be less than 60 minutes [1-3]. The UK national average DNT in stroke thrombolysis in 2014-15 was 57 minutes [3].

The aim of this audit was to see how the James Paget University Hospital’s (JPUH) DNT compared with the UK national average, and to investigate the causes for any delay (>60 minutes) in DNT in stroke thrombolysis.

METHODS
All Patients who were thrombolysed at the JPUH between 19/01/2016- 12/03/2017, were identified by using Sentinel Stroke National Audit Programme (SSNAP) data collection sheets. A data collection form was used to record symptom onset, A+E arrival, CT scan and thrombolysis times. Those who had a DNT of >60 minutes were subject to a retrospective review of their A+E and clerking notes via e-HR to identify any documented sources of their delay and data entered into an electronic spreadsheet.

Results
44 cases were identified and 27 cases were analysed. The average DNT was 73 minutes. 63% of cases had a DNT >60 minutes. Identified reasons were: 37% of cases had no documentation regarding the delay, 33% of cases telemedicine equipment was faulty, 15% of cases had a clinical contraindication, 7% of cases the radiographer was delayed, in 4% there was a delay in CT scanner availability and in 4% an out of policy presentation required additional investigations.

Conclusion
The JPUH has a greater DNT in stroke thrombolysis that the national average and of recommended guidelines. Recommendations included: improve documentation through redesigning SSNAP data sheets, regularly servicing telemedicine equipment and a service review regarding our out of hours protocol to analyse whether our current protocol can be amended to help improve the JPUH’s performance.

References
management. [Internet]. 2017. Section 1.4 [Published March 2017, last accessed 09/06/2017]. Available from: https://www.nice.org.uk/guidance/cg68/chapter/1-guidance


An unfortunate artist - a case of Proton Pump Inhibitor-induced hypomagnesaemia

Soong, N. Chok, Y. Gannon, D. Colchester General Hospital.

Background
A 71 year-old female artist presented with three-week history of worsening hand tremor, unsteadiness and paraesthesia. She has type two diabetes mellitus, bronchial asthma, peripheral vascular disease and hypothyroidism. Apart from the medications for her medical conditions, she was also on Omeprazole, which was started by an out-of-hours GP when she had dyspepsia a few years ago. Omeprazole was continued despite resolution of dyspepsia.

Upon examination, there were fine resting tremors in her hands. Blood investigations revealed low magnesium (0.15 mmol/L) and low corrected calcium (1.77 mmol/L) level. The diagnosis of Proton Pump Inhibitor (PPI)-induced hypomagnesaemia and hypocalcaemia was made.

Omeprazole was stopped and she was treated with oral electrolytes supplements for two weeks. Her symptoms, in tandem with the serum calcium and magnesium level, normalised within one month, and remained normal off treatment.

Discussion:
PPI are widely used for the treatment and prevention of gastro-oesophageal reflux disease (GORD) and peptic ulcer disease (PUD). Long term PPI use can cause hypomagnesaemia, a rare but potentially serious complication.

The exact mechanism of PPI-induced hypomagnesaemia is still unclear. It was proposed that PPIs can cause the malfunctioning of transient receptor potential melastatin (TRPM) channels, resulting in decreased active magnesium absorption from intestine.
Hypocalcaemia can also happen concurrently as low magnesium causes functional hypoparathyroidism due to impaired parathyroid hormone release.

The discontinuation of PPI will lead to normalisation of magnesium and calcium level, as clearly demonstrated in this case. The substitution of one PPI for another can cause recurrence, demonstrating a class effect [1]. In most cases, hypomagnesaemia occurred after PPI use of over one year [1,2,3].

Learning Points:
Long-term PPI use can result in hypomagnesaemia and hypocalcaemia, leading to deleterious consequences. PPIs should be prescribed only when there is a clear indication, and should be stopped when no longer indicated.

References
Poster 9
Subjective and objective differences in estimates of daytime sleepiness using the Epworth Sleepiness Scale according to gender in patients with sleep disordered breathing: Possible implications for ability to drive safely.

Venn, P. Schofield, K. The Sleep Disorder Centre, The Queen Victoria Hospital

Background
The Epworth Sleepiness Score (ESS) has been assessed both subjectively by the patient, and objectively by their partner, for all new referrals to our centre since the mid 1990s (approximately 25,000 referrals). We have observed that there is a difference between the reported subjective and objective scores when the patient is male and the partner is female, from those obtained when the patient is female and the partner is male.

A retrospective audit has been conducted to examine this postulate further in patients presenting with a primary presenting complaint of sleep disordered breathing.

METHOD AND RESULTS
437 patients (244 males, 193 females) were stratified into eight groups according to the value of their subjective ESS: 0-7 (Group A), 8-11 (Group B), 12-15 (Group C), 15+ (Group D), as well as by their gender.

At low values of ESS, all the patients scored themselves lower than their partner scored them, but this difference decreased at higher values.

Male patients showed an exaggeration of this reducing trend moving from lower to higher values of ESS, with patients scoring themselves lower than their partner scored them in the groups A, B and C, but higher in the group D.

In female patients the trend was reversed, with patients assessing their scores lower than their partner scored them in the Group A, but higher in groups B, C and D.
CONCLUSION

These results suggest that males assign themselves a lower Epworth score than their partners do except where there is a high degree of daytime sleepiness. Conversely, female patients score themselves as more sleepy than their partners score them in all groups except group A.

We postulate that males seek to play down or lack insight into their degree of daytime sleepiness until they are severely compromised, but also that males may underestimate the degree of sleepiness in their partners through lack of observation or perception. Overall,
females may give a more accurate estimate of daytime sleepiness both in their partners and in themselves.

At present the Drivers and Vehicle Licensing Agency (DVLA) in the UK uses the ESS as the main benchmark of ability to drive safely. These results may have important implications for assessing the ability of male patients to drive, implying that a female partner may give a more accurate and objective opinion. Further studies are needed to produce a validated objective measurement of ability to drive safely.

REFERENCES


May-Thurner Syndrome: An underappreciated cause for DVT.

Sharif, M. Hussain, S. Irshad, M. Wilson, H. Doncaster and Bassetlaw Teaching Hospitals

Introduction:
May-Thurner syndrome (MTS) is not a very well known entity to the physicians. It is characterized by the left common iliac compression against the fifth lumbar vertebrae by the right common iliac artery, as it crosses in front of the vein. The venous outflow obstruction can result in chronic venous hypertension or venous occlusion with or without deep venous thrombosis (DVT). Although it accounts for around 2-3% of lower limb DVTs (1), we do not know its exact incidence, as it can be asymptomatic in the majority of patients. It is important to recognize this condition as patients may require thrombolysis or thrombectomy, followed by venous angioplasty.

Case details:
We present two cases of female patients presenting with left sided DVT who were found to have MTS. The first case is a 68-year-old, who presented with a two-day history of left leg pain and swelling, with no predisposing known factors. She underwent Doppler scan of left lower limb veins but this was inconclusive. A CT (Computed Tomography) angiogram of lower limbs was arranged which confirmed left iliofemoral DVT. The second case is a 50-year-old patient who was also diagnosed with extensive left iliofemoral DVT after a recent history of two to three hours of air travel. First standard Doppler scan of left leg was reported as negative for DVT. She underwent CT scan of abdomen and pelvis due to unexplained left leg swelling. CT confirmed extensive DVT of Left Common Iliac vein. Both patients underwent thrombolysis followed by stent insertion (figures 1 & 2). These two cases are different in presentation to a classic MTS presentation where majority of the patients are diagnosed at ages 20-40 years.

Conclusion:
We recommend that the diagnosis of MTS should be considered in female patients with left sided iliofemoral DVT.

References
Aim
Capnography is a well-established tool within resuscitation, it providing essential monitoring of end-tidal carbon dioxide levels for the patient being resuscitated1, and forming part of the current European Resuscitation Council (ERC) Guidelines2.

The aim of this study was to establish how frequently capnography is being used at St Richards Hospital during in-hospital cardiac arrests within non-specialist areas such as on the general wards, AMU, A&E (majors & minors), or in public areas such as waiting areas or toilets. Specialist areas relate to Theatres, ITU, and A&E Resus where capnography is routinely available. This would help establish how effectively ERC Guidelines2 are being adhered to and whether there is any need for additional equipment or support to help facilitate this.

Methods
The cardiac arrest manifests and relevant clinical notes from August 2016 to January 2017 were examined.

All attending anaesthetic doctors were also contacted with a questionnaire.

Outcomes/Results
Capnography was never immediately available during cardiac arrests in non-specialist areas over the time period examined.

It was reported as being eventually utilised 8 times out of the 23 cardiac arrests that took place (35% of the time). This was after a significant delay, the equipment being sourced from a specialist area.

Additional comments by attending anaesthetists offered insight from previous Trusts/employment. 80% stated they had used small portable capnography devices, either carried by responding clinicians or placed in cardiac arrest bags/trolleys.

Conclusion
In line with current ERC Guidelines2, capnography should be made readily available for use in cardiac arrest in non-specialist areas.

A more portable device should be implemented; this being placed in a cardiac arrest ‘pack’ that would be the responsibility of the on-call anaesthetist to take to each cardiac arrest call. A further device could be carried by the Critical Care Outreach Team who attend every cardiac arrest.
References


Patterns of stroke in people with atrial fibrillation admitted to hospital

Khan, A. Pilgrim Hospital.

Background and Aim
In people with atrial fibrillation (AF), anticoagulation reduces the risk of cardioembolic stroke but increases the risk of cerebral bleeding (1). Little data exists on the types of stroke in people with AF admitted to hospital.

This study seeks to characterise types of AF-related stroke admitted to hospital.

Methods
All individuals admitted to the Stroke Unit at Pilgrim Hospital, Boston, UK between (01 August 2013-01 August 2015) with a primary diagnosis of cerebrovascular accident and AF were extracted from the Stroke Sentinel National Audit Programme database. Case records were reviewed for type of stroke, use of anticoagulant and value of the international normalised ratio (INR) on admission (if on warfarin).

Results
165 patients with AF (M = 83, 50.3%; F = 82, 49.7%) were admitted with stroke, representing 16.4% (165/1006) of all admissions. Mean age was 80 + 0.69 (sem) years.

Of 165 individuals admitted, the majority (154, 93.3%) had cerebral infarction. Cerebral infarction was the first manifestation of AF in 27.9% (43/154) individuals with infarction. Of the 111 patients who presented with an infarct, and were known to have AF, 66 (59.4%) were not on anticoagulants on admission.

Only 29.1% (48/165) were on anticoagulants on admission (8 direct oral anticoagulants, 40 warfarin). Of these, only 3 (6%) had a cerebral bleed. Of those with cerebral infarct (n = 45), 37 were on warfarin. Of these, 27 (73%) had an INR < 2.0.

Conclusion
In this study, the predominant type of stroke in people with AF was cerebral infarction, presumably due to embolism. The majority of individuals with cerebral infarction were either not anticoagulated or had sub-therapeutic anticoagulant levels on admission. Cerebral bleeds on anticoagulants were infrequent. These findings suggest more emphasis should be taken to prescribe and monitor anticoagulation in individuals with AF to prevent strokes.

References
Are hospitals providing accommodation for tired on-call doctors?
Byrne, H. Akbar, T. Osnanlou, O. Hampshire Hospitals NHS foundation Trust / Warrington Hospital NHS Trust

AIM:
This project was undertaken by a group of junior doctors, through communication with NHS trusts in England, Wales and Northern Ireland. The media has highlighted “tired doctors make mistakes” and growing numbers accidents have been reported involving tired junior doctors. This work aims to establish the proportion of NHS trusts providing accommodation to doctors after long shifts, the ease of accessing this accommodation and any financial impact this may have and ultimately to improve safety, for both junior doctors and their patients.

METHOD:
A freedom of information (FOI) request was sent out to all NHS trusts in England, Wales and Northern Ireland, to establish if they offered accommodation and how easy it was to access including, cost, if this needed to be paid upfront, any subsidisation and how much notice was needed to obtain a room.

RESULTS:
Within the time frame provided, 101 of 199 trusts responded, of which 76% provided accommodation, with 48% providing it free of charge. For those that charged, prices ranged from £8-£65, with a median cost £27/night. Of those that responded, only 3% subsidised rooms and 75% required the cost to be paid upfront.

CONCLUSIONS:
We believe that accommodation is a significantly underused resource. However, with a median cost of £27/night, a 4 night stretch could potentially cost £112, done regularly this is a significant proportion of junior doctor’s salary and is unlikely to be sustainable. Here we highlight differences in policy between NHS trusts, but are these differences justified? This work aims to improve the working life and safety of junior doctors and next steps include doctors highlighting their own experiences of the issue. Improving the working lives of junior doctors can help retain them in training, reduce rota gaps and hopefully improve patient care.

References
Kecklund G, Axelsson J. Health consequences of shift work and insufficient sleep. BMJ.2016;;i5210.
Poster 14
The need for efficient Handover: Improving handover at BNH.

Pearce, K. Akbar, T. Basingstoke Hospital.

Background
Given the increasing nature of shift patterns for on-call teams, there is a need for high quality handover to ensure continuity of care and ensuring patient safety.

However, the quality of these handovers can be poor, potentially leading to adverse events.1

The handover system is used to identify patient most at need of review and any clinical decisions that may be required.2

Aim:
1. To raise awareness of the importance of patient handover
2. Encourage effective communication and improve timeliness and quality of handover.

Method:
We attended ‘Hospital at Night’ handover at North Hampshire hospital and reviewed the handover process for one month in September 2016, and one month in June 2017.

We looked at:
- Time of arrival.
- The attendance of team members.
- If members were introduced.
- The number of interruptions.
- Whether a sufficient traffic light system of patients took place.

Results

![On-time](chart.png)
The results showed that the finishing team struggled to make handover on time. On 2 occasions this was due to an unwell patient. On average 4 hours per month was lost waiting for handover. Introductions of the team were rarely made and interruptions during handover occurred 90% of the time.

A triage system was used 28% of the time. 12 patients became unwell during the night shift, that should have been highlighted at handover.

**Conclusion**

The data pointed out some important aspects of handover that were lacking and were potentially having an effect on continuity of care. Since then, we have highlighted this data at our Junior doctor forum and introduced a register, had bleep free period during handover and a bleep warning 10 minutes before handover starts. We feel these changed can have a positive impact on the quality of handover.

**References**


Poster 15
To establish how accurately CAP is diagnosed in hospital and whether CAPs are followed-up appropriately after discharge. To improve patient safety.
Goodwin, D. Royal Free Hospital.

Background:
Community-acquired pneumonia (CAP) is common, has a high mortality and can be a harbinger of serious underlying disease such as lung cancer. It is therefore essential for patient safety that CAP is diagnosed and followed up correctly.

Aims:
To establish how accurately CAP is diagnosed in hospital and whether CAPs are followed-up appropriately after discharge. To improve patient safety.

Methods:
Diagnosis and follow-up of CAP at Princess Royal Hospital in December 2016/January 2017 were audited against ‘BTS guidelines for the management of community-acquired pneumonia in adults - 2009’.

82 CAPs were diagnosed during this period (after exclusion criteria were applied). These were divided into ‘true CAPs’ (45/82) where the PACS report of the CXR identified new consolidation and therefore met BTS diagnostic criteria, or ‘false CAPs’ (37/82) if they did not.

Discharge summaries were used to assess whether clinical follow-up plans met BTS standards for ‘true CAPs’. Follow-up CXRs were identified on PACS.

Outcome/results:
Only 55% of CAP diagnoses were correct (‘true CAPs’). For ‘true CAPs’ follow-up CXR occurred in only 47%, and appropriate clinical follow up in only 27%. Follow-up CXR occurred in 38% of ‘false CAPs’.

Interventions:
1. A teaching session was held for doctors on the BTS diagnostic criteria for CAP and recommendations for follow-up.
2. Results were presented at the hospital medical meeting. All teams in attendance agreed a basic set of standards for how follow up should be arranged.
3. Posters specifying these standards were displayed in doctors’ offices around the hospital.
4. Re-audit:-

RE-AUDIT results, May 25th to June 25th 2017. Before intervention After intervention
Diagnostic accuracy 55% 79%
F/up CXR within 10 weeks  47%  58%
Appropriate clinical follow up requested  27%  63%
False ‘CAPs’ that had f/up CXR (unnecessary)  38%

**Conclusions:**
1. CAP is diagnosed inaccurately in hospital, and appropriate follow-up is arranged far too infrequently. This risks harming patients.
2. Simple measures such as teaching sessions and workstation prompts for junior doctors, and departmental agreement on how best to follow guidelines can lead to a significant improvement in practise.

**References**
Impact of an Acute Oncology Service (AOS) at 2 District General Hospitals

Benjamin, A. Garman, C. Wingfield, K. Bowers M. Royal Glamorgan Hospital

Background
At our trust (Popn 289400, x2 district general hospitals) the AOS was clinically available from September 2015. The team consists of 5 members; 2 consultants (1 clinical lead at one site. 1 radiology lead across both sites for metastatic spinal cord compression- 1 session per week each.) 2 clinical nurse specialists full time, 1 data coordinator full time. The clinical consultant lead is a physician in respiratory, acute and general medicine (author.) Our AOS is funded by Macmillan as a 3 year project.

Outcomes (Sept 2015 to Jul 2017)
1. 1373 patients (1349 of which received input) have been seen by AOS.
2. Median reduction in length of hospital stay from 11 to 6.5 days for patients with carcinoma of unknown primary (CUP).
3. AOS intervention has led to cancelling 43 investigations/procedures and the early discharge of 36 patients totalling 74 days saved (see tables)

Conclusions/Personnel Reflections
An effective AOS service improves quantitative outcomes (reduced LOS, avoiding unnecessary inputs,) and enhances qualitative outcomes for patients (advocates for CUP patients, better communication*)

The outcomes above are almost exclusively down to the AOS nurses but we feel physicians in particular are ideally placed as clinical leads for this service.

We also suggest that useful attributes for the physician clinical lead may be
1. Good working relationships with colleagues in oncology, radiology, surgery and their own medical department
2. Decision making
3. Awareness of limitations/ensuring continuous quality assurance by running difficult cases through a cohort of oncology colleagues
4. Continually asking “what would I advise this patient if they were my relative”

For present and future AOS services, this team would recommend that an enthusiastic physician would be an asset to the service.
Early Discharge & Input Avoidance

Number of Early Discharges Advised | 47
Number of Early Discharges Taken   | 36
Days Saved                         | 74
Introduction
Over a century ago, William Osler famously said “Listen to your patient, he is telling you the diagnosis”.

A thorough history should guide appropriate investigation, yet have we become over-reliant on tests? With more detailed and accessible imaging, incidental findings may lead to diagnostic uncertainty.

This interesting case report demonstrates that occasionally, incidental findings direct us back to the history – and the diagnosis.

Description
66 year old male, admitted with colicky loin-pain and CRP of 217. Creatinine normal

CTKUB imaging performed for nephrolithiasis, revealed a left peri-renal mass. Referred to MDT as suspected malignancy.

Image 1; Patient CTKUB showing left renal mass

MDT outcome was of a benign angiomyolipoma with perinephric bleeding, requiring no further investigation.
Whilst awaiting MDT, a thorough history revealed an assortment of symptoms:

1. Tiredness
2. Myalgia
3. Fevers
4. Weight loss
5. Exertional dyspnoea
6. Chronic dry cough
7. Epistaxis, haemoptysis
8. Unilateral hearing-difficulty

Significantly, whilst taking the history, hoarseness of voice was noted alongside unilateral red-eye.

Image 2; Anterior Uveitis

Multisystem inflammatory disease was suspected and further investigations were requested. Ophthalmology confirmed uveitis, laryngoscopy identified dilated nasopharyngeal vasculature. Urinanalysis demonstrated proteinuria, and microscopic red cells.

Renal, lung and nasopharyngeal involvement suggested Granulomatosis with Polyangitis. This was confirmed by positive C-ANCA, anti-PR3 antibodies and renal biopsy.

This is a rare systemic necrotising vasculitis. Untreated, it has a high mortality.

The patient was treated with prednisolone, plasmapheresis, cyclophosphamide and rituximab.
Conclusion
Thorough history taking remains the cornerstone of diagnostics. In this case, literally listening to the patient was crucial in reaching a diagnosis.

Incidental imaging findings complicate clinical presentations and can lead to unnecessary anxiety. However, as in this case, they may also indirectly lead to life-saving diagnoses - with the help of old-fashioned history and examination.

1. Ealing Hospital, London, UK


HIV Testing on the Medical Admissions Unit (MAU) in 3 hospitals in the South West of England

Woolson, K. Bond, H. Pearce, A, Saunders, M. Royal Cornwall Hospital.

Background/Aim
Human Immunodeficiency Virus (HIV) testing on MAU has traditionally had a very low uptake, especially in areas of low HIV prevalence. Concerns around consent for testing and the social stigma surrounding HIV contributes to this. The British HIV Association (BHIVA) published ‘UK National Guidelines for HIV testing’ in 2008 [1] outlining clinical indicator conditions that should prompt testing in the medical population. We audited our local adherence to the guideline within 3 hospitals in South West England.

Methods
Notes were reviewed immediately after the post-take ward round by a consultant. We excluded patients under 17 and over 70 years of age. We looked at whether HIV testing had been identified as required during the initial clerking or the post take ward round. If no testing was recommended and the patient presented with an HIV indicator condition we looked at whether testing was undertaken at any point during their in-patient stay.

Results
There were 195 admissions with indicator conditions, only 24 (12%) patients were tested for HIV from this patient group. This leaves us with 171 patients presenting with indicator conditions as set out by BHIVA in their 2008 guideline who did not receive HIV testing. Of the 24 patients tested there were no positive results.

The most common indicator condition identified was bacterial pneumonia with 116 patients presenting with this condition.

Conclusions
HIV testing on the MAU is much lower than expected despite clear guidelines being available since 2008. We need to do better if we are going to prevent late diagnoses of HIV. Late diagnosis increases morbidity and mortality, increases risk of transmission and has significant financial implications to the NHS which could all be avoided with a more timely diagnosis.

References
Introduction
A 35-year-old male presented with central pericarditic chest pain and fevers. He had no past history but used intravenous (IV) drugs 14 years ago.

On examination, vitals: BP 128/84 mmHg, HR 130bpm, SpO2 90% on room air, RR 30 breaths per minute. There were no audible heart murmurs, pericardial or pleuritic rubs and no peripheral stigmata of infective endocarditis or signs of recent IV drug use. A 12-lead ECG showed widespread subtle ST segment elevation.

A computed tomography pulmonary angiogram (CTPA) demonstrated a segmental pulmonary embolism and a moderate global circumferential pericardial effusion.

He subsequently admitted that due to boredom from unemployment, he had attempted to aspirate blood from his left groin with a 14-year old needle he had wiped clean by hand. He intended to create euphoria without injecting drugs but his wife interrupted him and hit him. He kept hold of the needle and syringe but in falling onto his side was concerned he had lost a needle fragment in his left groin.

Further inspection of his left groin did not reveal a needle remnant and neither did a pelvic radiograph or ultrasound scan.

Echocardiography demonstrated a moderate pericardial effusion without tamponade and no valvular pathology or vegetations. Pericardiocentesis was performed revealing a purulent effusion. A foreign body was incidentally noted in the mid RV free wall in keeping with needle embolisation.

Blood and pericardial cultures confirmed Methicillin Sensitive Staphylococcus aureus infection. He was treated with high dose IV flucloxacillin. 50% operative mortality was quoted due to risk of mediastinitis and the needle was embedded too deeply into the RV myocardium for a percutaneous snare. Six weeks of IV flucloxacillin and 3 months of Rivaroxaban 20mg daily instigated.

He remained well with no recurrence of sepsis at one year.

References


Poster 21
Reducing time to endoscopy from suspected colorectal cancer GP referrals to ensure compliance with the 62-day cancer pathway

Siddiqui, Z. Aya, H. Ahmed, R, Sorelli, P. King’s College Hospital / Lewisham and Greenwich Trust

Background:
The 62-day cancer pathway set out by the NHS promotes prompt cancer diagnosis and treatment. At Queen Elizabeth Hospital (QEH), Woolwich, the main delay in the colorectal cancer pathway was from GP referral to first investigation.

Aim(s):
Our aim was to ensure that at least 90% of patients referred by GPs on the suspected colorectal cancer pathway to QEH were investigated by endoscopy within 14-21 days, by February 2017.

Methods:
Data (total number of endoscopy appointments, time to test from GP referral, and attendance of appointments) was collected in two-week blocks over three time periods. 16/05/16-31/05/16 before instigating a rapid access pathway (RAP - same day booking of endoscopy appointments from clinic, dedicated suspected colorectal cancer endoscopy lists)); 17/10/16-28/10/16 to assess the impact of the RAP; 06/01/17-31/01/17 following implementation of proformas for use by the endoscopy booking team to reduce cancellations. Statistical analysis was performed using the Mann Whitney test.

Results:
Data from 187 patients (mean age: 65 years; range 24-97 years; M:F 1:1) were analysed. After the first intervention (RAP), the percentage of patients investigated within 21 days increased from a median of 0% to 73.2% (p<0.001) and the median number of days to endoscopy decreased from 44 to 19.5 (p<0.001). The second intervention (endoscopy booking proforma) yielded no significant changes (p=0.906).

On average, patients had 1.1 endoscopy appointments. 92% of patients attended the original endoscopy appointment.

Conclusion:
While the 90% target for investigation within 21 days was not met, a significant reduction in waiting time to endoscopy, with a concomitant increase in number of patients investigated within 21 days was achieved. Initiating a RAP ensured earlier diagnostics to allow a much better chance of compliance with the 62-day target. This method could be employed by other trusts to improve compliance with the 62-day target.
Case
A 62-year old lady with no significant past medical history and previously independent was found collapsed on the floor with left-sided weakness at 07:50 am. On arrival to the Emergency Department (ED), she had aphasia with left-sided hemiparesis and left facial palsy (NIHSS 19). Neuroimaging showed acute middle cerebral artery (MCA) infarct with occlusion of distal M1 segment. She was thrombolysed with alteplase at 09:30 am.

The patient was intubated in ED and transferred by air ambulance to a thrombectomy centre for timely revascularisation. Mechanical thrombectomy (MT) was performed within 5 hours 24 minutes of symptom onset. She subsequently had right hemicraniectomy for malignant MCA syndrome the following day. She was repatriated to the spoke centre for further rehabilitation with left sided weakness, but her speech was back to normal (NIHSS 10).

Discussion
Mechanical Thrombectomy is now the recommended treatment for acute ischaemic stroke due to large vessel occlusion (1,2). Not all hospitals, however, have the infrastructure and manpower to offer the treatment. Transferring a patient in a timely manner from a spoke to a hub centre is crucial. In this case, transfer by helicopter reduced the travel time from approximately two hours to 40 minutes and was the only means to reach the nearest MT centre within the recommended treatment window of 6 hours. Helicopters are not commonly used to transfer acute stroke patients, but due to the limited MT centres in the region, it was used for timely transfer to another region.

Learning points
This is a case of rapid transport by helicopter from Accident & Emergency Resuscitation due to significant distance to a thrombectomy centre for timely intervention.

It highlights the challenges of arranging a helicopter for timely transfer of suitable patients to the currently limited thrombectomy centres, particularly in the East of England.

References
Poster 23
Emergency Department Procedural Sedation Practice in Adults

Introduction:
Safe sedation is a key component of procedural sedation of any Emergency Department (ED) and auditing it promotes best practice and reduced the likelihood of complications.

Aim:
To audit ED Procedural Sedation practice in adults at Northampton General Hospital and how this compares to the RCEM (Royal College of Emergency Medicine) Procedural Sedation Clinical Audit standards.

Methods:
A retrospective notes review was undertaken of all adult patients that required procedural sedation over a period of 3 months. A total of 51 patients were included. “Safe sedation proform”, patient notes and control drug book were reviewed for data collection.

Results:
22% of patients undergoing procedural sedation had their ASA grading documented, 14% had prediction of difficulty in airway management documented and 18% had their pre-procedural fasting status recorded. Only 31% of patients had documented evidence of informed consent.

All patients had their procedural sedation in resuscitation area in ED. 47% had documentation of presence of 2 doctors. 27% of patients had documentation of presence of pulse oximetry, 18% documented use of capnography and 22% of ECG. 18% had documented use of oxygen, although only 4% since start of procedure. Following procedural sedation only 4% of patient notes had documentation regarding adverse effects. Levels of patient satisfaction were not recorded and no written advice was given to patients when discharged home.

Conclusions: Documentation of procedural sedation in ED does not meet the set standards of RCEM sedation audit. The action plan includes “safe sedation proform” remodelling to increase compliance when it comes to document procedural sedations, teaching and engaging with doctors/nurses about sedation and to re-audit in 2018 and submit our results to RCEM for the national re-audit next year. The results of this audit and our aims demonstrate our commitment to improve patient care in ED which will eventually have an impact in other specialities and overall NGH performance.
References
https://www.rcemlearning.co.uk/references/adult-procedural-sedation/ (2014)
AoMRC Safe sedation practice for healthcare procedures – standards and guidance (2013)
RCoA and RCEM Safe Sedation of Adults in the Emergency Department (2012)
Introduction
A 67-year-old female, presented acutely to hospital with a 5-month-history of chest pain.

The pain was exertional in nature but later occurred at rest. She described it as a dull central chest and lower sternal ache, radiating to the back. Interestingly, it was relieved on sitting down and bending over.

The only cardiovascular risk factor was - current cigarette smoking.

She later complained of dysphagia and subsequently developed some weight loss. The patient was seen by gastroenterologist and underwent gastroscopy, which was normal. However, CT thorax abdomen pelvis revealed a large descending thoracic aortic aneurysm, measuring 5.8 x 7.2cm, with no leak (figure 1).

While awaiting review by vascular surgeons, she presented to casualty with acute chest pain. Acute coronary syndrome (ACS) was initially suspected, however, there were no changes on ECG and sequential troponins were both normal. No anti-platelets or LMWH were given due to concerns over her large thoracic aortic aneurysm.

She was reviewed by cardiologist and felt that her presentation was not in keeping with an acute coronary event. There was also persistent sinus tachycardia noted and unexplained haemoglobin drop, which raised suspicion of possible internal bleeding. A transfer over to vascular surgeons was organised that day and she underwent successful thoracic endovascular aortic aneurysm repair (TEVAR).

She is now doing well and with no more chest pain.

In summary – not every central chest pain is cardiac in nature. Inappropriate initiation of ACS treatment, may have had catastrophic effect in cases like this. Whilst it is possible the two conditions to co-exist, a large aortic aneurysm could actually mimic angina and GI pathology by impinging on surrounding structures.

*Figure 1: Contrast CT scan demonstrating a 7cm thoracic aortic aneurysm*
Figure 1: Contrast CT scan demonstrating a 7cm thoracic aortic aneurysm and the final result after the repair (TEVAR), on the right.

Figure 2: The descending thoracic aortic aneurysm is also visible on the Chest radiography. Of note, the heart size is normal.
Introduction:
There is an increasing prevalence of Tumour Necrosis Factor-alpha (TNF-α) antagonists use such as adalimumab in the treatment of autoimmune disease. While the side effect profile of adalimumab is favourable and it is considered less immunogenic than other humanised monoclonal antibodies, it is important to recognise demyelinating disorders as a rare adverse event given its morbidity.

Case report:
A 37-year-old female was commenced on adalimumab, a TNF-α antagonist, for psoriasis. Five years later she presented with a new onset tonic clonic seizure, transient left sided upper limb weakness and poor balance. History revealed a progressive personality change with occasional aggressive episodes and a decline in memory and attention span with impaired cognitive function.

The neurological examination revealed an ataxic gait that progressively worsened over a period of two weeks. Cranial nerves were intact. No other focal neurology was present. =

MRI demonstrated an abnormal high FLAIR with high T2 signal intensity within the body of the corpus callosum extending into the adjacent sulci on both sides of the falx. CSF analysis was normal.

Histology of the lesion showed subacute demyelination. High dose intravenous steroid therapy with discontinuation of adalimumab led to significant resolution of symptoms and lesion on previous MRI, confirming the diagnosis of demyelination secondary to adalimumab.

We performed a literature review that revealed 23 cases of adalimumab associated demyelination. Mean duration from the commencement of adalimumab to onset of symptoms of demyelination was 28.8 months (range 2 weeks – 4 years). In 22 of 23 cases, the adalimumab was stopped and most cases reported a clinical improvement with or without the use of steroid therapy.

The case we have presented is unique in that it the only case of those reviewed with a confirmed histological diagnosis of demyelination.

References


Poster 26
Making an impression: The four wheeled walker user with chronic skin changes

Elliott, C, Arrowe Park Hospital

Background:
Walking aids improve mobility, give independence and boost confidence in patients who need extra support to maintain balance or stability whilst walking. With an increasingly older population, such devices are commonly used. Often such devices, bought without physiotherapy input, are inappropriate, damaged, or the incorrect height. [1] Wheeled walkers are even reported to make patients live longer. [2]

The Case: A 92-year-old female was seen on the acute medical take following a mechanical fall and assessment by physiotherapy as part of a multidisciplinary team review. She mobilised with a privately bought four-wheeled walker with no prior physiotherapy education on its use. She walked with a stooped posture leaning on the handles with her forearms to steer it. Examination of the forearms showed bilateral chronic skin changes, inferior to the elbows at the position where she leaned on the handles which were dry and tender. [Figure 1] This was due to inappropriate technique and incorrect pressure when using the walker over a prolonged period of time and the frame being the incorrect height. She needed extensive physiotherapy input as she found it difficult to adapt to use it properly.

Discussion:
The optimal forces exerted onto a wheeled device have been described. [3] Maintaining an erect posture is essential due to reduced muscle and vertebral forces in the older person. Should the user be stooped, a lower handgrip, sustaining an upright trunk and pushing the handgrip downwards by leaning their upper body on the walking aid is recommended. If this case patient had been similarly advised then the chronic skin changes may have been avoided.

Conclusion: This unique case, which has not previously been described in the literature, highlights using mobility aids correctly is vital, encourages the reader to take a detailed social history and stresses the value of the multidisciplinary team.

References
Background
The benefits of inter-professional resuscitation training are well documented 1, 2. In our workplace we identified several problems surrounding resuscitation attempts, including inappropriate defibrillation and administration of chest compressions to patients with a valid DNACPsR order.

Aims
Our objective was to improve the response to patients with cardiorespiratory arrest through the provision of multidisciplinary clinical and simulation training.

Actions taken
We designed and implemented a teaching programme for all tiers of nursing staff and foundation doctors. The programme covered ALS algorithms, the contents of the trust resuscitation trolley, and a discussion of potential barriers to successful resuscitation attempts. Following this, we covered practical skills including airway manoeuvres, chest compressions and safe defibrillation, and put these into practice with simulated scenarios incorporating real life ward challenges.

Measures and Outcomes
Pre and post course confidence levels and knowledge were assessed through use of survey monkey. Candidate feedback was positive, showing an improvement in all areas after the intervention (fig 1).

Conclusions and Future Plan
We conclude that multidisciplinary simulation teaching helps to improve teamwork, confidence and clinical skills. We recognise the difficulty in demonstrating a tangible improvement to patient outcomes from our data, however we can infer that increased confidence in relevant skills will help the multidisciplinary team respond appropriately to a cardiopulmonary arrest. We aim to identify further areas of improvement by evaluating 2222 calls to the ward over the next 6 months and we plan expand from this pilot initiative to involve other departments within the trust.
References

Poster 28

Medicine reconciliation within the short stay unit

Medicine Reconciliation Within the Short Stay Unit: Quality Improvement Project
J S Costello, B Thompson, A O’Kane, G Millar, L Browne, A Kearney, R Fair, LJM Cross

Medicines Reconciliation “is the process of identifying an accurate list of a person’s current medicines and comparing them with the current list in use, recognising any discrepancies, and documenting any changes, thereby resulting in a complete list of medicines, accurately communicated.” (1) As part of the BHSCT Safety Quality Belfast (SQB) a multidisciplinary team participated to develop a quality improvement project to address the medicine reconciliation process on admission to the short stay unit within the Clinical Assessment Unit (CAU). Within Northern Ireland there is sharing of medical notes from inpatient stays and from outpatient clinics on an electronic platform called Electronic Care Record (ECR).

The aim was to improve the process of Medicines Reconciliation for patients admitted to the 12 bedded Short Stay Unit within CAU, with a target of 92% of patients having a drug history in their medical notes at the point of admission.

Change ideas:
Our project team discussed ideas which may assist in changing the doctors’ admission process within CAU, which included:

- Highlighting the use of ECR to aid the medicines reconciliation process
- Utilising the Trust’s medicines reconciliation policy
- One-on-one pharmacy sessions discussing the process of medicines reconciliation
- Emailing all staff to highlight the ward project and our aims

Results

<table>
<thead>
<tr>
<th>% of Medical staff completed ECR: Medicine Reconciliation Forms</th>
</tr>
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<tbody>
<tr>
<td>Date of Observations</td>
</tr>
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</table>

Conclusion

This project is the first step of the BHSCT’s Medicines Reconciliation Improvement Project and the RVH Acute Medical Unit will be the next clinical area to try and implement this process. A recommendation from our project is to consider a review of the Trust’s Medicines Reconciliation Policy, with an aim of making it more user friendly with a documented step-wise approach to the process of medicines reconciliation.

The user-guide for ECR that we produced will assist in the training of junior doctors and could be incorporated into a revised BHSCT policy.

References (100 words)

A case of Stevens-Johnson Syndrome following pneumonia

Twaij, S. Al-Janabi, A. Todd, P. Addenbrooke’s Hospital, Cambridge

Background:
Stevens-Johnson syndrome (SJS) is a rare condition most commonly precipitated by medication and can be triggered by infections. It is characterised by a painful blistering rash that also affects mucous membranes, and is classified as “skin detachment <10% of body surface area”\(^1\). It is potentially life threatening and is a dermatological emergency.\(^1\)

Case:
A previously well 10-year-old girl presented with a one-week history of malaise, fever, productive cough and headache. She had seen her General Practitioner and had taken three doses of amoxicillin for suspected pneumonia. Subsequently she developed swollen lips, mouth ulcers and conjunctivitis, and went on to develop SJS requiring admission to paediatric intensive care.

On initial assessment she was hypoxic and febrile with inflamed and ulcerated lips and oral mucosa. The mucosal lesions became more extensive and she developed vesicular lesions over the trunk and lower limbs, and ulceration of the labia. Serology showed positive results for HSV seroconversion, Mycoplasma pneumoniae seroconversion, Borrelia and Streptococcus (positive ASO titre).

She was treated with azithromycin, aciclovir and intravenous immunoglobulin. At outpatient follow-up, all of her skin lesions had healed.

Discussion:
Infection is a well-recognised trigger for SJS, with several possible causes in this case. Management is supportive with treatment of the underlying cause. This case was managed effectively as part of a multidisciplinary team approach between the Dermatology, Paediatrics, Intensive Care, Infectious Diseases, Ophthalmology and Ear, Nose and Throat specialties.

References
Aim:
Urticaria (hives) is a common condition which results in superficial skin swelling. It develops acutely and results in wheals, that itch.1 Angioedema, occurs at a deeper level involving the lower dermis and subcutis, which causes painful swelling of skin, most commonly around the eyes, hands and mucosae.1

The purpose of this audit was to analyse the management of urticaria in Peterborough City Hospital’s dermatology department.

Methods:
Compliance of management of urticaria was evaluated against British Association of Dermatologists (BAD) guidelines on the management of urticaria. Points 1, 2, 4 and 5 were evaluated.2 This retrospective audit had a sample size of 25 patients. Selected patients were identified through departmental dermatology databases and electronic letters between 2013-2015.

Results:
Oral corticosteroids were prescribed in 20% of patients who failed to respond to antihistamines. There was non-compliance with the use of immunomodulatory treatment in cases where first and second line treatment had failed. Thyroid function and autoantibody tests were carried out in 50% of patients who did not respond to first line treatment. Record of NSAID ingestion and advice to patients to avoid NSAIDs was achieved in 16% of cases.

Conclusion:
To increase compliance with BAD urticaria management points, an urticaria screen option was created on the Integrated Clinical Environment (ICE) system. BAD guidelines were also circulated to the Dermatology Department. A re-audit will be carried out next year.

References