



IEMTA 2015

SPRING SCIENTIFIC MEETING

THE IRISH EMERGENCY MEDICINE TRAINEES ASSOCIATION

The Royal College of Surgeons in Ireland, Dublin 2

Friday 24th April 2015

The Programme of Meeting and Abstracts



Programme

18:30 Refreshments & Registration

18:30 - 18:55: Poster Presentations

19:00 - 20:00: Lightning Oral Presentations:

1. Retrospective audit of the investigation of patients with suspected acute subarachnoid haemorrhage in St. Vincent's ED

J. Jordan, Department of Emergency Medicine, St. Vincent's University Hospital, Elm Park, Dublin.

2. Electronic Sharing of Patient Data: A survey on the attitudes and behaviours of NCHDs in Emergency Medicine

N. McCoy, Department of Paediatric Emergency Medicine, Children's University Hospital, Temple Street, Dublin.

3. Acute Urinary Retention – Time to Catheterisation

J. O'Keeffe, Department of Emergency Medicine, St. Vincent's University Hospital, Elm Park, Dublin.

4. Can 'hotspotting' prove to be a useful tool to reduce ED attendance in the general hospital setting?

E.J. McGovern, Department of Surgery, Mayo General Hospital, Castlebar, Co Mayo.

5. Impact of Emergency PCI pathway on outcome of patients surviving out of hospital cardiac arrest (OOHCA)

N. Borhan, Department of Emergency Medicine, Mater Misericordiae University Hospital, Dublin.

6. Fever in a Returned Traveller from Africa – The Ebola Conundrum

M. Nguyen, Department of Emergency Medicine, Mater Misericordiae University Hospital, Dublin.

7. Management of Shoulder Dislocations in an Irish Emergency Department

J. Foley, Department of Emergency Medicine, St. Vincent's University Hospital, Elm Park, Dublin.

20:00 - 20:30: **"Toxicology and the Emergency Department"**

*Dr Edel Duggan, Clinical Director of the National Poisons Centre
Beaumont Hospital, Dublin.*

20:30 - 21:00: **Paediatric Emergency Medicine**

*Dr Ike Okafor, Consultant in Paediatric Emergency Medicine
Children's University Hospital, Temple Street, Dublin.*

21:00 - 21:30: **"Have a heart – guidelines for organ donation"**

*Dr Vicky Meighan, Specialist Registrar in Emergency Medicine
The Adelaide and Meath Hospital, Dublin.*



Poster Presentations

1. A study of pre operative time management and implications in patients presenting with hip fractures

*E. Mac Suibhne, L. Gleeson, D. Breslin, B. Leahy, L. Brent, D. Fitzgerald
Department of Emergency Medicine, Waterford University Hospital, Waterford.*

2. A Hard Case to Swallow

*S. Broderick, RMO, Galway Clinic, Galway.
G. Pate, Consultant in Cardiology, Galway Clinic, Galway.
A. Coss, Consultant in Gastroenterology, Galway Clinic, Galway.*

3. A real "air head"

*B. Keane, J. Pflipsen, S. Ni Bhraonain
Department of Emergency Medicine, St James' Hospital, Dublin.*

4. The Circulation of Dublin's City Marathon

*J. Jordan
Department of Emergency Medicine, St. Vincent's University Hospital, Elm Park, Dublin.*

5. 'Put your money where your mouth is'

*E. Mac Suibhne, S. Ni Bhraonain, C. McDermott
Department of Emergency Medicine, St. James' Hospital, Dublin.*

6. "A Right Pain in the..." Mondor's disease; an unusual presentation of anterior chest wall pain

*S. Faughnan, R. Tanner, G. Kelleher
Department of Emergency Medicine, Cork University Hospital, Cork.*

7. Bacteraemia in the ED: Are We Meeting Targets?

*N. Borhan¹, C. Ní Cheallaigh², B. Dinesh³, A. Moughty¹
¹Department of Emergency Medicine, Mater Misericordiae University Hospital, Dublin.
²Department of Infectious Diseases, Mater Misericordiae University Hospital, Dublin.
³Department of Microbiology, Mater Misericordiae University Hospital, Dublin.*

8. Is Spinning Safe: Exercise induced Rhabdomyolysis

*C. Adedokun
Department of Emergency Medicine, Cork University Hospital, Cork.*

Poster Presentations

9. Alcohol related presentations in Galway University Hospitals Emergency Department

G. Pszkit, B. McNicholl

Department of Emergency Medicine, University Hospital Galway, Galway.

10. Wilson's disease: a case presentation

E. Quinn, L. Cunningham, N. Quinn, K. Cunningham

Department of Emergency Medicine, Sligo Regional Hospital, Sligo.

11. Agenesis of Abdominal Inferior Vena Cava associated with Deep Venous Thrombosis.

J. A. Awan, M. Z. Azhar, B. McNichol

Department of Emergency Medicine, University Hospital Galway, Galway.

12. What is the evidence for fluid boluses in the management of the collapsed child in the emergency setting?

T. McHugh, G. Cheok, W. Yi Chong, E. Glanville, S. K. Lis, J. Timoney

Year 4 Medicine, School of Medicine, Trinity College Dublin, Dublin.

The Adelaide and Meath Hospital, Dublin.

13. Use of Ultrasound in assisting the diagnosis of Pulmonary Embolism

L. Cunningham, E. Quinn, M. Kileen

Department of Emergency Medicine, Sligo Regional Hospital, Sligo.



Retrospective audit of the investigation of patients with suspected acute subarachnoid haemorrhage in St.Vincent's ED

J. Jordan, D. Barton

Department of Emergency Medicine,
St. Vincent's University Hospital, Elm Park, Dublin.

Introduction:

The aim of this clinical audit was to examine the diagnostic investigations used when subarachnoid haemorrhage is suspected in adult ED patients and to compare our practices to those of international guidelines

Methods:

Chosen population included adult patients presenting to our ED between 01/08/2014 – 31/12/2014 with headache mentioned in triage note
Sample size n = 397
Maxims – to ascertain those triaged as headache, their MRN and scanned ED notes, Syngo system to review imaging reports, Labs to assess LP reports and Sphinx to analyse the data from the questionnaire.

Results:

Of 397 clinical cases reviewed 76 were considered for inclusion.
74 underwent a CT. 68 (89%) of patients had a negative CT. 6 (8%) had a positive CT brain, 41 did not undergo LP.
Of the 41 patients who did not receive RIC, 13 (31.7%) had a documented reason for no LP, 9(21.9%) were admitted medically for various reasons, 8 (19.5%) had no documented reason, 6 (14.6%) did not wait or discharged against medical advice, 4 (9.7%) were transferred prior to LP, 1 (2.4%) had failed LP and refused second attempt.
10 patients underwent a CT intracranial angiogram post negative lumbar puncture. 9 underwent a CT intracranial angiogram in the absence of LP following a negative CT.

Conclusion:

Forty-one of seventy-six (54%) patients didn't receive RIC as per AHA/ASA, European Stroke Assoc. and ACEP guidelines.
9 of 41 patients did not have any documented justification for not performing RIC.
According to AHA/ASA and European Stoke Assoc. guidelines CT angiogram may be considered in workup of SAH. However a negative CT angiogram doesn't obviate need for CSF analysis.

Electronic Sharing of Patient Data: A survey on the attitudes and behaviours of NCHDs in Emergency Medicine

N. McCoy, I. Okafor, S. Deiratany

Department of Paediatric Emergency Medicine,
Children's University Hospital, Temple Street, Dublin.

Introduction:

Concerns regarding the integrity of patient data and thus the protection of patient confidentiality in an era of rapidly progressing data sharing capabilities have been publicised as far back as 1997, with the release of the NHS' Caldicott report. Since then, technology allowing for instantaneous and widespread dissemination of data has become ubiquitous, with the proliferation of email and subsequently smart phones, combining camera and messaging functionality. Such advances enable doctors in the ED to obtain rapid off-site specialist opinion in instances that would have previously required the specialist to be on-site. This arguably enables the provision of a higher standard of patient care but increases the risk of breaches in patient data integrity and poses a risk to confidentiality.
We surveyed ED doctors regarding practices relating to the electronic sharing of patient data, their views on the ethical implications of this, and their behaviours toward data protection.

Methods:

An online anonymous survey was distributed to all trainees in emergency medicine and to all NCHDs working in Temple Street ED between July 2014 and January 2015. Questions pertaining to the methods, motivations and ethical consequences of data sharing were contained within the survey, as well as questions relating to data protection.

Results:

41 responses were collected (34 from emergency medicine trainees and 7 from doctors working in paediatric emergency medicine).
100% of survey respondents stated that they have electronically captured and distributed patient data, most commonly forwarding x-rays for orthopaedic opinion. Applications such as WhatsApp and Viber were the most commonly used methods, with 92% of respondents having used this type of service to share data, 73% stating this to be their most frequently used method. Only 5% of respondents were aware of HSE sanctioned methods of electronically sharing digitally captured patient data. 58% of trainees stated that the data remained in their possession for at least 1 month.

Conclusion:

Electronic data sharing is ubiquitous among ED doctors, which they feel enables them to provide better patient care. However, no standardised secure HSE sanctioned methods of data sharing are widely available. This work suggests that there exists a need for the development and implementation of such processes.

Acute Urinary Retention – Time to Catheterisation

J. O’Keeffe, D. Menzies

Department of Emergency Medicine,
St. Vincent’s University Hospital, Elm Park, Dublin.

Introduction:

- To review number of cases of acute urinary retention presenting to St. Vincent’s hospital Emergency Department
- To assess:
 - time to catheterisation
 - use of antibiotics
 - use of analgesia
 - documented renal function, size of catheter
 - referral made

Methods:

- Presented with ‘urinary,’ ‘retention,’ Urology,’ or ‘catheter’ on MAXIMS system
- Had catheter changed by ED staff
- Start Dec 2014 – End February 2015
- CEM guidelines as standard
- Results compared to similar audit performed in 2009

Results:

- 41 patients catheterised
- 15 within one hour - 37%
- 27 within two hours – 66%
- 4 had residual volume recorded
- 22 were of size 16 or less for primary retention
- 20 appropriately referred
- 8 had bloods documented
- 24 had size documented
- 19 documented as aseptic/sterile technique used

Conclusion:

- Improvement compared to 2009 results
- Not meeting CEM standards
- Poor documentation
- Time not recorded

Can ‘hotspotting’ prove to be a useful tool to reduce ED attendance in the general hospital setting?

E.J. McGovern¹, J. Bolger¹, P. Coyle¹, R. M. Waldron¹, D. Courtney¹, A. Jackson², K. Barry¹

¹Department of Surgery, Mayo General Hospital, Castlebar, Co Mayo.

²Department of Emergency Medicine, Mayo General Hospital, Castlebar, Co. Mayo.

Introduction:

As acute hospital services are rationalised, there is increasing strain put on existing emergency services. Previous work has identified groups who put excessive strain both on ED and outpatient services. These can be classified as ‘frequent users’ (4-7 attendances per year) and ‘super users’ (≥8 attendances per year). Hotspotting allows the identification of areas with disproportionate numbers of frequent and super users, allowing focussed allocation of community resources. This leads to significant cost savings and eases the burden on acute services. All hotspotting to date has focussed on large urban centres.

Methods:

ED attendances from 1st July 2013-30th June 2014 were logged. Frequent users and super users were isolated. Addressed were cross referenced against national census data to determine number of users per 500 population in geographically distinct regions. These were plotted using Google mapping software.

Results:

There was a large difference in attendances based on geographical area. Numbers of frequent users ranged from 1.00/500 population to 4.88/500 population. Numbers of frequent users and super users combined ranged 1.25/500 population to 6.27/500 population. Four out of nineteen areas had ≥4 frequent users only per 500 population. There was no correlation between number of users and distance from MGH ($r^2=0.03$). Combining super user and frequent user data showed seven of the nineteen areas were geographically distinct hotspots.

Conclusion:

There are a number of geographically distinct hotspots for frequent users of ED services for our catchment area. Use of services is not linked to proximity to service provision. This data will allow future planning of community interventions to potentially decrease unnecessary ED attendance.

Impact of Emergency PCI pathway on outcome of patients surviving out of hospital cardiac arrest (OOHCA)

N.Borhan¹, M. Garstka², B. Marsh²

¹Department of Emergency Medicine, Mater Misericordiae University Hospital, Dublin.

²Department of Intensive Care Medicine, Mater Misericordiae University Hospital, Dublin.

Introduction:

Optimal treatment of patients surviving (OOHCA) remains unclear. Introduction of early reperfusion therapy (PCI) has improved the outcome. We conducted this audit to study the impact of introduction of PCI pathway in our Hospital on patient’s survival rate and ICU length of stay.

Methods:

We retrospectively reviewed data from ICU database, ICIP and Patient Centre between years 2011 – 2014 and compared this data with previously collected data from year 2003.

Results:

Between years 2011-2014, total of 39 patients were successfully resuscitated post (OOHCA) and underwent emergency PCI, subsequently they were admitted to Intensive Care Unit. 61% of these patients survived until discharge from ICU and 59% survived until hospital discharge. Comparing to pre-PCI pathway the numbers were 38% and 19% respectively. Mean length of stay among the survivors of pre-PCI pathway was 12.6 days vs 7.6 days for PCI pathway. Among the patients who deceased in ICU pre-PCI pathway was 7 days vs PCI pathway 5.8 days.

	OOHCA number of patients	total of	Survived to ICU discharge % (n)	Survived to hospital discharge % (n)	LOS survivors /days/ mean (range)	LOS non-survivors /days/ mean (range)
Pre-PCI pathway (2003)	21		38 (8)	19 (4)	12.6 (3-40)	7 (1-30)
2011	14		57 (8)	57 (8)	8 (2-28)	2 (1-4)
2012	6		50 (3)	50 (3)	3.67 (1-5)	13 (8-22)
2013	9		77 (7)	66 (6)	8.2 (3-24)	6 (5-7)
2014	10		60 (6)	60 (6)	8.5 (4-12)	6 (2-12)
PCI pathway (2011-2014)	39		61 (24)	59 (23)	7.67 (1-28)	5.8 (1-22)

Conclusion:

In conclusion, patient’s survival rate to ICU discharge and hospital discharge among the survivors of (OOHCA) has significantly improved when comparing pre-PCI pathway management with emergency PCI treatment. We are going to extend our study to include all patient successfully resuscitated after OOHCA in years 2011-2014 (including patients who did not undergo emergency PCI) to obtain the overall survival rate of patients resuscitated after OOHCA.

Fever in a Returned Traveller from Africa – The Ebola Conundrum

M. Nguyen¹, D. Morley², G. O’Connor¹, J. Lambert²

¹Department of Emergency Medicine, Mater Misericordiae University Hospital, Dublin.

²Department of Infectious Diseases, Mater Misericordiae University Hospital, Dublin.

A 47 year old Nigerian male self-referred to the ED in August 2014 with abdominal pain, vomiting, fevers and rigors. He recently returned from a 1 month trip to Nigeria having travelled to Abuja, Owerri and Lagos.

He presented to a hospital in Lagos shortly after arriving and was admitted to hospital for 2 weeks. There, he was treated for acute appendicitis and malaria. An appendectomy was recommended but he declined.

At this time, Lagos was listed as an Ebola outbreak region and immediate precautions were taken including use of PPE, isolation and management according to the Ebola Virus Disease Risk Assessment. On initial assessment, vitals were stable; there was generalized abdominal tenderness with rebound and guarding. There were no signs of petechiae, bruising or bleeding. Appendicitis remained the primary differential.

The EVD Risk Assessment determined there was “No High Risk Exposure” however an alternative diagnosis had to be confirmed. A major problem arose at this stage between the many players. A CT AP was required by the Surgeons to confirm appendicitis but Radiology needed a renal profile before administering contrast.

The Laboratory refused to process bloods if Ebola remained a differential however the ID team did not think activation of the National Isolation Unit protocol was necessary. Ultimately, A CT was done without a renal profile and confirmed appendicitis. Routine bloods were processed thereafter—Urea 30.7 and creatinine 1400 –severe AKI!

This was one of the first cases of ?Ebola that presented directly through the ED at the Mater Hospital. It identifies the difficulties in assessment of returned travellers and HCWs from outbreak areas and how key players have different primary interests. Furthermore, gaps in PPE preparedness, isolation room suitability, access to investigations and point-of-care testing make safe and efficient diagnosis an issue. Although the EVD Risk Assessment has been long established, each case allows for reflection on how steps in recognition, diagnosis, and management can be improved.

Oral Presentations

Management of Shoulder Dislocations in an Irish Emergency Department

J. Foley, S. Clarke, N. Salter, J. Ryan

Department of Emergency Medicine,
St. Vincent's University Hospital, Elm Park, Dublin.

Introduction:

This audit was carried out to assess the current management of shoulder dislocations in St. Vincent's University Hospital Emergency Department (ED) in accordance with the College of Emergency Medicine (CEM) guidelines. Data was obtained from cases that presented to the ED from January–September 2014. The audit was then repeated in March 2015 to assess for an improvement in standards.

Methods:

Population: Patients that presented with shoulder dislocations to the emergency department from January to September 2014 and from October 2014 to March 2015. The sample was selected using the Orthopaedic fracture clinic appointment book. Patients that were ultimately admitted by medical or surgical specialities were not included in this audit. Medical notes were reviewed retrospectively using Maxims and Syngo imaging and data was extracted into Microsoft Excel.

Results:

Cycle 1 (n=96)	Cycle 2 (n=75)
<p>Group A – Relocated with sedation (n=68)</p> <ol style="list-style-type: none">60% of pain managed as per CEM standards76% of patients had x-ray within 60 minutesReduction:<ol style="list-style-type: none">87% had attempt within 2 hours96% had attempt within 3 hours89% had sedation adequately documented92% had post-reduction x-ray documented88% had follow up arrangements documented	<p>Group A – Relocated with sedation (n=45)</p> <ol style="list-style-type: none">66% of pain managed as per CEM standards82% of patients had x-ray within 60 minutesReduction:<ol style="list-style-type: none">98% had attempt within 2 hours100% had attempt within 3 hours82% had sedation adequately documented96% had post-reduction x-ray documented96% had follow up arrangements documented
<p>Group B – Relocated without sedation (n=12)</p> <ol style="list-style-type: none">58% of patients had analgesia documented75% of patients had x-ray within 60 minutesReduction:<ol style="list-style-type: none">100% had attempt within 2 hours100% had post-reduction x-ray documented100% had follow up arrangements documented	<p>Group B – Relocated without sedation (n=15)</p> <ol style="list-style-type: none">80% of patients had analgesia documented60% of patients had x-ray within 60 minutesReduction:<ol style="list-style-type: none">100% had attempt within 2 hours100% had post-reduction x-ray documented100% had follow up arrangements documented
<p>*Excluded – Relocated prior to arrival or no documentation (n=16)</p>	<p>Excluded – Relocated prior to arrival or no documentation (n=15)</p>

Conclusion:

Management of shoulder dislocations in this ED meets the standards as set down by the Royal College of Emergency Medicine and over a 6 month period we have improved our service, particularly regarding pain management, documentation of post-reduction x-ray and follow up arrangements and attempting reduction with 2 hours. Our standards have fallen with regards to documentation of sedation in group A and in group B, only 60% of patients had an x-ray within 60 minutes. This has the limitation that patients with recurrent dislocations do not always receive an x-ray but it is still an aspect of this audit that we must improve to meet the clinical standards advised by the RCEM.

The results show that this ED matches the UK RCEM guidelines and in some cases exceeds the recommendations despite the difficulties encountered with overcrowding. This supports the concept of streaming in our ED which identifies the patients most at need for urgent management. We recommend this as an appropriate quality initiative for all Irish EDs.