IEMTA 2014

SUMMER SCIENTIFIC MEETING

THE IRISH EMERGENCY MEDICINE TRAINEES ASSOCIATION

Royal College of Surgeons in Ireland, Dublin 2.

Friday 27th June 2014

Programme of Meeting and Abstracts

Irish Emergency Medicine Trainees Association

Summer Scientific Meeting 2014

Programme

18:30 - 18:55: Poster Presentations

Pneumomediastinum and subcutaneous emphysema in a young asthmatic; a case report
E. McMackin, Department of Emergency Medicine, St Columcille's Hospital, Co. Dublin.

Bite Wound Management in Adults
S. Ni Bhraonain[1], E.Mac Suibhne[2], A. Moughty[1], J. O'Sullivan[2]
[1]Department of Emergency Medicine Mater Misericordiae University Hospital, Co. Dublin
[2]Department of Emergency Medicine Adelaide and Meath Hospital, Co. Dublin

Bite Wound Management in Children
S. Ni Bhraonain, J. Pfilpsen, C. Blackburn
Department of Emergency Medicine, Our Lady's Children's Hospital, Crumlin, Co. Dublin

Consultant Sign Off of patients presenting to Connolly Hospital Emergency Department with non traumatic chest pain
B. Collins, L. Messner, N. Collins
Department of Emergency Medicine, Connolly Hospital, Blanchardstown, Dublin 15.

Sodium Azide poisoning
R. Kalichuran, Department of Emergency Medicine, Mater Misericordiae University Hospital, Co. Dublin

18:55 - 19:00: Global Emergency Medicine Care Skills Presentation

19:00 - 20:00: Lightening Oral Presentations:

1. **Cognitive impairment and delayed analgesia in fractured neck of femur**
   Dr. N. Reilly, Department of Emergency Medicine, Our Lady of Lourdes Drogheda, Co. Louth.
2. **Connolly Hospital Blanchardstown - Renal Colic Audit**
   Dr. L .Chien Yap, Department of Surgery, Connolly Hospital, Blanchardstown, Dublin 15.
3. **Spontaneous Pneumothoraces; A Collapse in Management?**
   Dr. G. Watson, Department of Emergency Medicine, St Vincent's University Hospital, Dublin.
4. **Assessing the Final Diagnosis and Outcome of Soft Tissue Shoulder Injuries in the Emergency Department**
   Ms. A. McCarthy, Department of Emergency Medicine, Kerry General Hospital, Co. Kerry.
5. **ED "super---users" and geographic "hot spots": is there a missing link?**
   Mr. B. Lowry, Department of Emergency Medicine, Beaumont Hospital, Co. Dublin.
6. **Penetrating Injuries - Who Cares? Analysis of a Single Urban Unit Experience**
   Dr. N. Kharytaniuk, Department of Surgery, Connolly Hospital, Blanchardstown, Dublin 15.
7. **Comparison of the Management of Acute Urinary Retention in the ED, SVUH with the standards set out by the College of Emergency Medicine, and how we compare to UK Hospitals.**
   Dr. M. O Tuathail, Department of Emergency Medicine, St. Vincent's University Hospital, Co. Dublin.

20:00 - 20:30: **"Audit and Research in Emergency Medicine – A North American Experience"**
Dr. Rachel Gilmore, Consultant in Emergency Medicine, Naas General Hospital.

20:30 - 20:45: Clinical Hot Topic:
"When ecstasy is too hot to handle!"
Dr. Brigid Collins, Registrar in Emergency Medicine, Connolly Memorial Hospital, Blanchardstown, Dublin 15.

20:45 - 21:15: Debate:
What EM process do not have the evidence base and should be put into room 101
Dr Andy Neil, Specialist Registrar in Emergency Medicine
Dr Alan Watts, Specialist Registrar in Emergency Medicine
Dr John Cronin, Specialist Registrar in Emergency Medicine

Global Emergency Care Skills

IEMTA

Cognitive impairment and delayed analgesia in fractured neck of femur

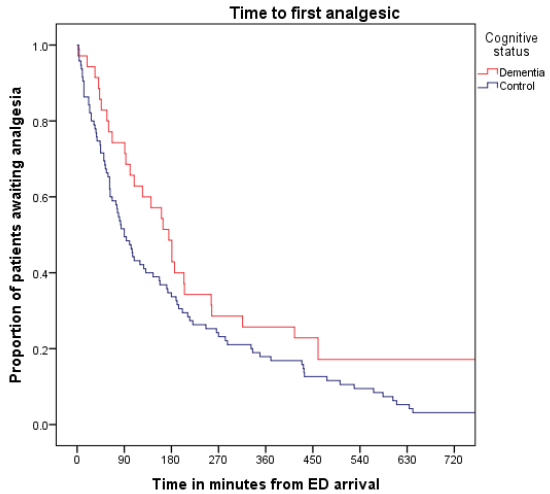
G. Markey[1], N. Reilly[1]

[1]Department of Emergency Medicine Our Lady of Lourdes Hospital, Drogheda, Co. Louth

Introduction
Cognitive impairment is present in a significant proportion of patients who present with hip fracture. It is both a risk factor for hip fracture and a poor prognostic indicator when present in a patient with this injury. We examined the timeliness of analgesic delivery to patients with known dementia and hip fractures compared to cognitively intact controls.

Methods
Trauma Audit and Research Network data were used to identify patients treated in our institution for hip fractures in the period January 2013-March 2014. Medical records were reviewed. Consecutive patients presenting *de novo* to ED were identified. Data abstraction included time of ED arrival and time of administration of first analgesic, and cognitive status. Time to analgesia was analysed by the Kaplan-Meier method stratified by cognitive status. The log rank test was used for statistical significance.

Results



130 patients with neck of femur fracture were studied, 35 with dementia and 95 controls. Time to first analgesic was significantly longer in patients with dementia (log rank, $p = 0.025$). Median time to first analgesic was 175 minutes in patients with dementia compared to 90 minutes in the cognitively intact.

Conclusion
Cognitive impairment was significantly associated with delayed ED treatment of pain from fractured neck of femur in dementia patients compared to cognitively intact patients.

Connolly Hospital Blanchardstown - Renal Colic Audit

Dr Lee Chien Yap – Surgical SHO, Connolly Hospital, Blanchardstown
Dr Nicole Farrell – Urology Registrar, Connolly Hospital, Blanchardstown
Dr Dermot Bowden – Surgical SHO, Galway University Hospital

Introduction
Renal colic presents with acute symptoms characterized by very intense, agonizing pain, which requires fast diagnosis and prompt treatment. Pain management is one of the most important components of patient care and has been identified as an indicator of performance and quality of patient care in an Emergency Department.

Methods
50 consecutive cases of renal colic that presented acutely to the Emergency Deparment (ED) were selected. The management of these patients was assessed against the clinical standards set by the College of Emergency Medicine (CEM) Clinical Effectiveness Committee (CEC). The results were directly compared to the performance of national results published by the CEM in the UK.

Results
A pain score was recorded during the triage process in 100% of cases. 32% of patients presented in severe pain. Of those 50% had analgesia within 20 minutes, 58% within 30 minutes and 75% within 60 minutes. 68% of patients presented in moderate pain. Of those 19% had analgesia within 20 minutes, 34% within 30 minutes, and 46% within 60 minutes. Only 39% of patients had documented evidence of re-evaluation of their pain. 81% of patients had documented evidence of a dipstick urinalysis. 100% of patients were considered for radiological evaluation with an XR-KUB or CT-KUB or both. An action pain was documented in 84% of patient notes. An FBC and UEC was performed in 100% of patients but recorded in the clinical notes in 76% and 81% of cases respectively. 21% of patients presenting were over the age of 60 but only 12% showed documented evidence to exclude a AAA.

Conclusion
Pain management in the emergency setting is an important performance indicator that is underperforming at this institution. Adequate documentation is a critical step in improving clinical standards.

Spontaneous Pneumothoraces; A Collapse in Management?

G. Watson[1], N. Salter[1], V. Ramiah[1], D. Menzies[1], D. Barton[1], J. Ryan[1]

[1]Department of Emergency Medicine, St Vincent's University Hospital, Dublin.

A primary spontaneous pneumothorax (PSP) is a pneumothorax that occurs without a precipitating event in a person who has no known lung disease. Initial management is directed at removing air from the pleural space, with subsequent management focused on preventing recurrence. In recent years published clinical consensus statements have been developed to aid physicians in the diagnosis and management of PSPs. Despite recent studies suggesting that compliance with these guidelines is improving, adherence remains suboptimal. This retrospective study assesses compliance with established guidelines for the management of PSP with the aim of establishing the rate of failure of alternative management strategies.

The primary outcome measures that this audit sought to establish were:

Rate of Failure of Conservative Management and
Rate of Failure of Aspiration alone as the primary treatment modality for PSP in our ED

Secondary outcome measures assessed included:

Documentation of smoking status
Presenting symptoms and signs recorded
Imaging modalities used
Appropriate size classification
Appropriate management strategy based on size of pneumothorax and any pre-existing lung disease
Treatment Disposition
Complication rate

Our study found that the selection of patients for conservative management with a small pneumothorax and who are deemed clinically stable is a safe and effective treatment strategy. For patients with a small symptomatic pneumothorax, aspiration is a safe strategy and is effective in symptom relief. For patients with a large pneumothorax, aspiration may provide symptom relief however is associated with a high requirement for a second procedure: 61% of these patients requiring subsequent thoracotomy and chest drain insertion.

Provision of discharge information on risk factors and lifestyle modification is inconsistent and poorly documented. A patient information leaflet on PSP should be provided to patients on discharge addressing the issues of smoking cessation, and avoidance of sudden changes in atmospheric pressure.

Assessing the Final Diagnosis and Outcome of Soft Tissue Shoulder Injuries in the Emergency Department

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[2]Department of Orthopaedic Surgery, Kerry General Hospital, Co. Kerry.
[3]Department of Emergency Medicine, Kerry General Hospital, Co. Kerry.

Introduction

Patients who suffer shoulder injuries with no signs of fractures or dislocation are often discharged from the emergency department without further follow up. We theorised that a proportion of these patients may not recover spontaneously and may have ongoing symptoms due to undiagnosed significant soft tissue injury such as a traumatic rotator cuff tear.

Aim

To establish the clinical recovery in a cohort of patients who had normal shoulder X-rays following injury.

Methods

Patients who had shoulder X-rays requested following a shoulder injury between 01/01/2013 and 12/02/2013 were identified from radiology department records. They were contacted and invited to participate in the study. Data was collected via phone questionnaire to determine the cause of the hospital visit, the initial diagnosis and if any follow-up was required.

Results

Response rate was 47.3% (43/91). Of the 43 patients, 30 (70%) required further follow-up.56% of patients surveyed still had residual weakness or pain.

Conclusion

Further treatment was required in 70% of patients who suffered shoulder injuries but had no fracture or dislocation on X-ray. This suggests that plain X-rays on initial presentation to A&E may be usefully augmented with follow-up clinical assessment or additional imaging.

ED "super---users" and geographic "hot spots": is there a missing link?

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[2]Department of Emergency Medicine, Beaumont Hospital, Co. Dublin.
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[4]School of Undergraduate Studies, Royal College of Surgeons in Ireland, Ireland.

Introduction
To determine geographic "hot-spots" attributable to frequent Emergency Department (ED) attenders and to profile the characteristics of "super-users".

Methods
A retrospective review of Beaumont Hospital ED attendances during 2012 was performed. "Super-users" (>10 visits in a 1-year period) were profiled and geographically defined.

Results
There were 51,296 ED attendances by 34,895 attendees. Forty-seven super-users were identified. Twenty-five (53%) were male and 22 (47%) were female. Thirty-one (66%) were self-referrals and 5 (11%) were GP-referrals. They had a combined 901 attendances, with an average of 19.17 attendances per super-user (range of 11 to 87). The number of super-users represented just 0.13% of attendees but their number of attendances represented 1.76% of all. Thirty-four (72%) were within a 5-mile radius of the ED and 26 (55%) were located within three specific geographic hot spots.

Conclusion
We have confirmed that there are a group of super-users whose attendances account for a disproportional burden on the ED and whose demographics and geographical locations are non-random. In order to reduce ED attendance burden and resource utilization, multidisciplinary, targeted community intervention may be effective and deserves further study.

Penetrating Injuries - Who Cares? Analysis of a Single Urban Unit Experience

N. Kharytaniuk[1], GA Bass[1,3], A. Salih[1,3], M. Twyford[1], E. O'Conor[2], N. Collins[2], M. Arumugasamy[1,3], TN Walsh[1,3]

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[2]Department of Emergency Medicine, Connolly Hospital, Blanchardstown, Dublin 15.
[3]Royal College of Surgeons in Ireland

Introduction
Penetrating trauma – the classical presentation of disorganised crime – can pose a challenge in their management due to their complexity and unpredictability. We examined the experience of one urban unit in the management of penetrating injuries to draw conclusions pertinent to other Irish centres.

Methods
A retrospective study was performed of all penetrating injuries presenting to the Emergency Department (ED) of Connolly Hospital, Dublin over a four-year period (January 2009 to December 2012). Information was collected from the Hospital Inpatient Enquiry (HIPE) database, theatre logbooks and ED records.

Results
Over four years, 104 patients presented with penetrating stab injuries. Four mortalities were recorded; of those, two had previosly attended with minor injuries received from domestic violence. Abdominal injury was recorded in 22% of patients; 26% had multiple injuries not involving the abdomen; 11% had an isolated thoracic injury. Fifty-seven percent required surgery, of which 40% required emergency or early surgical intervention. Laparotomy and laparoscopy were required in 14 and 7% respectively, 5% required thoracotomy of which two had penetrating cardiac injuries, both of whom survived.

Conclusion
Our study shows that over half of cases of penetrating injuries require surgical intervention, including thoracotomy and laparotomy. Younger patients have the most complex injuries that require the highest intensity of emergency care. These data highlight the need for a trauma team in each Irish centre receiving trauma and a clear need for general surgeons on emergency on-call rotas to be certified in trauma management, particularly chest and abdominal injuries. There is an urgent need to centralise the management of trauma to a limited number of designated trauma centres to provide early imaging and adequate expertise by surgeons with a special interest in trauma management.

Comparison of the Management of Acute Urinary Retention in the ED, SVUH with the standards set out by the College of Emergency Medicine, and how we compare to UK Hospitals.

M. O Tuathail[1], T. McMahon[1], J. Cronin[1], D. Menzies[1]

[1]Department of Emergency Medicine, St. Vincent's University Hospital, Co. Dublin.

Introduction

Acute Urinary Retention is a common presentation to Emergency departments. The college of Emergency medicine (CEM) has set out clear standards as to how acute urinary retention should be best managed. We examined all cases of acute urinary retention that presented to ED SVUH over 4 months and compared these to he standards as set out by CEM – and then compared our practice with that in the UK.

Methods

We analysed the 60 cases of acute urianry retention that presented to ED SVUH from June to September 2013 using the ED Maxims system to identify patients. The medical notes were then analysed to assess how each case was managed. The CEM urinary retnetion tool was then used to allows analysis of the data and comparison with both the CEM standards and other UK hospitals.

Result

<5% of ED doctors recorded the actual time of catheterisation in the medical notes. 33% of patients were catheterised within 1 hour of arrival to ED, 67% within 2 hours which is above average when compared to the UK.
Adherence to antimocrobail guideline was an impressive, 78%.
Only 50% of patients had their renal function measured and recorded in the notes. Catheter size was appropriate as per CEM standards 56% of the time.
100% of patients were referred to OPD –as this would be routine practice in SVUH.

Conclusion

The Education of emergency doctors in relation to the management of acute urinary retention as per the college of emergency medicine should occur at induction, as the standards are not widely known and hence, are not adhered to.
When compared to the UK, SVUH is broadly in keeping with the national average but well above it in some instances.