Nafisa Kachwala-Bharmal

Elective at Royal London Hospital (RLH) – Emergency Medicine

Objective 1
Understand common presentations to the adult A and E department at RLH.

The Royal London hospital is situated in an area of ever growing and diverse population with a high proportion of people originating from Bangladesh. As such the emergency department is a busy place and sees many patients in the course of a day.
The attendees are a mix of the local population and the people who work in the area but live elsewhere.
Patients arrive at the department via a number of routes. These include walk –in patients, patients referred by their GP and patients brought in by ambulances or the police.
The case-mix of patients includes a high number of patients with cardiac problems followed by gastrointestinal problems including renal problems. Besides this there are a number of patients with minor injuries or fractures. There are also patients presenting with drug overdose, mental health problems and traumatic injuries following stabbing or gun shots.

A paper by Prof Harris et al published in Aug 2013 found that the majority of attendances were for injuries and cardiac conditions (1). Patients were 12% more likely to attend the ED with injuries and 4% more likely to attend with cardiac problems as compared to non-ED settings.(1)

Objective 2
Learn about management of trauma at RLH with regards to being a tertiary centre for trauma.

Trauma means multiple serious injuries that can cause death or disability (2).
It is caused by a number of mechanisms. Falling from heights and road traffic collisions affecting passengers, pedestrians and cyclists are the most common forms of trauma in the UK(3). The RLH also sees trauma cases of teenage stabbing and gunshots. Trauma is the leading cause of death in young people under the age of 45 and a cause of lifelong disability in many cases. Good trauma care is not only important to save lives but can also have an effect on morbidity

The Royal London hospital is a Major Trauma Centre and is part of the London Trauma system(3). The London trauma system was introduced in 2010 for streamlining trauma care with the objective of getting the patient to the most appropriate environment to meet their critical needs(3). RLH is also home to the HEMS team and is assisted by the London ambulance service.

When there has been a trauma, The HEMS team consisting of a senior trauma doctor and a specially trained paramedic can deliver time critical care at site(4). The patient is then flown to the RLH helipad and then transferred to the emergency department. The emergency trauma team is already assembled and consists of a emergency consultant who is the team leader, an anaesthetist, orthopaedic and surgical registrars, specialist nursing staff , mobile X-ray technicians, radiologist and a scribe. Members of the trauma team have specific tasks which they carry out and report to the team leader. The team leader

co-ordinates the trauma team and is in charge of getting the history from the paramedics, ordering investigations, interpreting results ,ordering fluids ,blood and keeping an eye on the whole picture.

The trauma team carry out a primary survey comprising airway, breathing ,circulation and focus on resuscitation and maintenance of vital signs such as BP ,oxygen sats, heart rate. Imaging and an FAST (focussed assessment with sonography for trauma) scan are performed to assess injuries and bleeding. Venous access is established and blood tests are sent off including for crossmatching. Following stabilization the secondary survey is done to detail any injuries missed earlier and if the patient is stabilized they are then transferred to the operating theatre for surgery.

If resuscitation efforts are failing and CPR has been commenced, a decision is made by the team leader regarding when to stop and the team are asked for their assent. If the team is in agreement, the CPR is stopped and time of death recorded.

Objective 3
To understand the reasons why patients present to the emergency department (ED).

Patients can access of range of healthcare options when feeling unwell. These include visiting their GP, walk-in centres and OOH centres. However, there are a number of things that lead to patients attending the ED.
Patients can be referred to the ED following a visit to their GP, who felt that they warrant further investigations and/or have a significant pathology.
Patients brought in by ambulances tend to be more unwell with perhaps a worsening of their condition or a sudden collapse.
The main group of interest however are the walk-in patients. Patients with minor injuries and falls felt that they could access the most effective care in the ED as compared to going to their GP. Also, there was an expectation of getting imaging mainly x-rays with relative ease and also any pain relief if needed.
Other patients who walk in definitely felt that they have a serious underlying condition and that they would benefit from some investigations. This was usually clearly evident in patients who presented with chest pains. They were mainly quite concerned that the symptoms might be suggestive of a heart attack. They felt they would get more immediate attention in the ED.
In some cases, patients couldn't get an urgent appointment with their GP for the same day and therefore had decided to come to the ED instead.
There were also some patients who felt unwell at work and found it more practical to come to the ED rather than visit their GP where they live.
Some patients were not registered with a GP and felt they could only access care via the ED.
For the general public, the ED is the most easily accessible route when urgent medical attention is needed. There is perhaps a gap in the knowledge of where patients can go to as an alternative to visiting the ED.

Objective 4
To gain more experience in assessing and managing acute presentations thereby improving my own competencies.

The time spent in the emergency department has been a very valuable learning experience for me. I have been able to practise taking a focussed history, do examinations and also practice practical procedures such as venepuncture, cannulation, ECG and Blood pressure measurements. I have become much more confident in these procedures and feel that it will serve me well for the F1 job.

I also saw a number of signs mainly coffee ground vomiting, a strangulated hernia and a very unusual case of cardiac bradycardia. There has been a good mix of cases and I have found the environment of the ED very conducive to learning. There have been opportunities to practise acute management of conditions such as pyelonephritis, exacerabation of asthma and acute coronary syndrome. I was surprised by the guideline for treatment of a STEMI which recommends 600 gms of Clopidogrel as opposed to 300 gms which I was familiar with.
The staff were very approachable and I have felt supported by the registrars and consultants and made to feel part of the team.

References:

1. Harris T, McDonald K. Is the case-mix of patients who self-present to ED similar to general practice and other acute-care facilities? Emerg Med J. 2013 Aug 28. doi: 10.1136/emermed-2013-202845. [Epub ahead of print]

2. Emergency and Urgent Care services. NHS Choices [online]. Available at http://www.nhs.uk/NHSEngland/AboutNHSservices/Emergencyandurgentcareservices/Pages/Majortraumaservices.aspx [accessed 22/05/2014]

3. Treating the disease of Trauma. Barts and the London SMD [online]. Available at http://www.smd.qmul.ac.uk/research/neuro/traumascience/trauma/index.html [accessed 22/05/2014]

4. Centre for trauma Sciences. Queen Mary University of London. [online]. Available at http://www.c4ts.qmul.ac.uk/clinical/trauma-patient-pathway/emergency-department/index.html [accessed 22/05/2014]