

Elective Report-Krishnie Srikandarajah

I undertook my elective report at the Royal London Hospital in Trauma and Orthopaedics.

What are the prevalent Trauma and Orthopaedic conditions encountered in a hospital in East London?

The Royal London Hospital is a Trauma centre in the UK, it sees a lot of patients who have had high-energy accidents such as motorbike accidents resulting in fractures and degloving injuries. This can vary from both young and old people. The patients were all discussed at 8.00 clock Trauma meeting every day and an appropriate management plan was discussed. However, despite the Royal London being a specialist Trauma centre it still sees patients with pathologies that can be seen across the UK and the world such those with osteoarthritis and rheumatoid arthritis needing hip and knee arthroplasty. Other conditions I encountered were sports injuries such as meniscal tears and cruciate ligament injuries.

Quality of care of Orthopaedics and Trauma?

At the Royal London hospital has a high quality of care. Trauma patients were seen quickly and their cases were reviewed by a team of specialists which meant that every management option was considered. As the royal london is a specialist trauma centre, it has all the equipment that is required and all operations were carried out aseptically.

Patients with Orthopaedic Conditions also received a high quality of care. After, a thorough history and examination, an x-ray would be taken. An MRI scan was also sometimes carried out.

In some patients arthroscopies were performed, this would involve smaller incisions therefore less scarring. Arthroscopic procedures are carried out on an outpatient basis with the patient returning home on same day. Because of the skill of the surgeons and the equipment facilities of the royal london these procedures are available.

The Royal London is situated in a deprived part the UK, whitechapel is one of the poorest parts of the UK with a high migrant population. Despite this, the Royal London accommodates all patients, regardless of class, colour and creed, whereas in other parts of the world they do not have this NHS system, poorer patients cannot afford treatment and have to live with their excruciating hip and knee pain.

Describe surgical management and ATLS in common Trauma and Orthopaedic conditions?

Management of acute trauma cases

The Acute Trauma Life Support (ATLS) guidelines are a standardised approach to trauma patients used in many hospitals. It is the standard of care for initial assessment and treatment in trauma centres such as the Royal London.

The primary survey is the first section of the assessment. During this time, life-threatening injuries are identified while at the same time resuscitation is started.

A Airway

B Breathing

C Circulation

D Disabilities

E Expose/Environment

A - Airway Maintenance with Cervical Spine Protection

The first step of the primary survey is to assess the airway. If the patient is talking, the airway is patent. If the patient is unable to maintain own airway, the airway can be opened using a chin lift or jaw thrust.

B - Breathing and Ventilation

An examination of the chest is carried out by inspection, palpation, percussion and auscultation. Six life threatening thoracic conditions as Airway Obstruction, Tension Pneumothorax, Massive Haemothorax, Open Pneumothorax, Flail chest segment with Pulmonary Contusion and Cardiac Tamponade need to be identified quickly.

C - Circulation with Hemorrhage Control

The main cause of post-injury death is haemorrhage. However, this can be prevented. When the level of haemorrhage is high, hypovolemic shock ensues. Two large-bore intravenous cannula lines are established and crystalloid fluid such as Volplex is given. If this fails, the patient can be given blood-type specific or O negative blood.

D - Disability (Neurologic Evaluation)

Initially, a basic neurological assessment is made, AVPU (alert, verbal stimuli response, painful stimuli response, or unresponsive). From this we can gauge the level of consciousness, pupil size and reaction, lateralizing signs, and spinal cord injury level. The Glasgow Coma Scale is also used to assess the patients' level of consciousness.

E - Exposure / Environmental control

The clothes of the patient are removed and the patient is covered with warm blankets to prevent hypothermia.

Orthopaedic Management

For conditions such as osteoarthritis patients are initially managed conservatively with lifestyle advice such as weight loss and told the importance of regular exercise. Physiotherapy is also provided. Once, the osteoarthritis becomes worse and the degree of pain and disability becomes too much for the patient to bear, the decision to operate is made. There are many surgical options. The first being debridement and washout. An arthroplasty can also be offered and gives effective pain relief for the patient and they can last for up to 10 years. Arthrodesis where the two sides are removed and fused together.

Those suffering sports injuries such as ligamentous injuries of the knees for example of the ACL. ACL reconstruction can be performed arthroscopically. Other sports injuries such as meniscal tears can also be treated surgically under arthroscopy.

Personal Goals

I really enjoyed this elective. Prior to starting this elective, I felt I had limited knowledge of orthopaedics and trauma. I was unaware of the ATLS protocol. Throughout the course of this elective, I have grown in confidence and feel a lot more comfortable taking an orthopaedic history and performing orthopaedic examinations. I feel a lot more confident in interpreting hip x-rays. I have also "scrubbed up" and assisted in many arthroplasties and arthroscopies. I also got the opportunity to develop my practical skills by suturing.