

**Dr Tadhg Kelliher**

**College Travelling Fellowship Award**

**Introduction:**

I am currently in my second year of training as an SpR in Emergency Medicine in the west of Scotland deanery. As part of my training I am required to undertake secondments of three months duration in other specialities. This serves both to improve my practical skills and to allow me to gain a greater understanding of the work of other specialists so that I can interface more efficiently with them in managing patients in common.

I recently undertook a secondment in Trauma and Orthopaedics. I arranged to do this in Tygerberg University Hospital, Cape Town, South Africa. The RCPSG granted me a Travelling Fellowship to cover some of the costs involved and I would like to express my gratitude to them for this.

Below is an account of the three months I spent in Cape Town.

**Training:**

I contacted the department head, Dr. Tim Hardcastle, in May of 2006 and with advice from Professor Lee Wallis, Professor of Emergency Medicine, applied for a visa as an affiliated student with Stellenbosch University. The west of Scotland deanery approved the secondment, as did the College of Emergency Medicine and I travelled to Cape Town on 01/11/06 to begin my three month secondment.

Tygerberg hospital is a large, public, tertiary referral centre in the northern suburbs of Cape Town, a city of approximately 3,000,000 inhabitants. The same district is also served by numerous secondary hospitals. The hospital with a capacity of 1400 beds was built in the apartheid era and effectively operated as two separate hospitals, an east and west wing with duplication of all services for whites and non-white races. These have been integrated as one unit since the end of the apartheid era. The working language of the hospital is Afrikaans. Within the hospital there is a self-contained trauma centre, which serves as the referral centre for the northern half of the western cape. This unit sees over 20,000 trauma cases per year. There is a 6 bedded resuscitation room where patients are cared for who require ventilation and resuscitation or post operative care and ongoing resuscitation when intensive care beds are not available. There is a trolley assessment area with space for 30 trolleys and a short stay ward, used mainly for the observation of patients with chest drains, as well as a trauma surgical ward of 26 beds for longer stay and post operative patients. The trauma unit is also supported by the intensive care department, which has 10 beds.

I began my secondment in Trauma Surgery and spent the first month with this service. Daily ward rounds were usually led by Dr. Hardcastle and the duty Trauma Registrar. Each patient was discussed and care handed over at the bedside, with any teaching points being elaborated on. Following the ward round the medical students carried out most of the ward work and the theatre lists were arranged. I was able to attend theatre and assist in a wide variety of cases. The trauma team dealt with any non-extremity trauma and all chest trauma not requiring thoracotomy as well as neck stabbings. Night time and weekends saw most of the workload present, with frequent shootings, stabbings and assault, as well as polytrauma cases from road traffic

accidents. I mainly worked weekend and night shifts as these represented the peak times in terms of workload. There was just one registrar on call and two Medical Officers who covered the "Front Room," so they were very appreciative of the extra help and I was very involved in the management of all cases. Most of the work undertaken involved laparotomy for gun shot wounds and stabbings. I focused my attention on the management of patients in theatre as I had experience in the initial management as was carried out in the front room from my work in Emergency Medicine.

I had the opportunity to assess patients in the front room that had been referred to Trauma Surgery and arrange their investigations and resuscitation and prepare them for surgery. It was interesting to then be in theatre to see first hand the findings at surgery.

Audit formed a large part of their activity and data was collected for all vascular injury, and penetrating neck trauma. Any outstanding theatre work from the weekend was usually dealt with by the following Wednesday. All chest stabbings below the nipple line were enrolled in a study in which they underwent laparoscopy to check for occult diaphragmatic injury, and this was done as part of the Wednesday list.

During the month with the trauma team my skills in assessing the trauma patient and prioritising those in need of surgery, improved greatly. I became familiar with the principles and the practice of damage control surgery, and I also became aware of the use of goal directed resuscitation. Although not validated for trauma resuscitation, the attempts at resuscitation were guided by the same goals as those for early goal directed therapy in sepsis management. The time spent in theatre boosted my confidence in basic surgical skills and demystified the further surgical management of cases encountered in Emergency Medicine.

The provision of a dedicated trauma surgery service offered significant advantages both for the smooth running of the hospital and to patient care, and is a model I think warrants consideration in the event of greater centralisation of services here. The trauma team accepted all trauma cases and were able to handle all the acute presentations and this greatly streamlined care particularly in the case of polytrauma with injuries to many systems. The workload and casemix offered a training experience no longer available here, and the existence of Trauma Surgery as a speciality allowed people with an interest in this area of surgery to develop and maintain skills which were very different from those required in elective cases. The trauma surgery service also conferred the added advantage of liberating other specialities to concentrate on their elective work.

I then rotated to the Orthopaedic and Hand Surgery service for one month. Teaching rounds took place daily and I then attended theatre where I was allowed to assist in the reduction and fixation of various fractures. As part of this rotation I attended fracture clinics where I experienced the longer term management and follow up of those fractures I had dealt with in theatre. Although there were elective lists every day I concentrated on the trauma list which ran constantly over 24 hours.

The hand surgery service is also run by the orthopaedic team. For two of the four weeks I attended the Emergency department to assess any referred hand injuries and arrange their theatre plan. I had the opportunity to assist with and later perform extensor tendon repairs and fix fractures with K wires.

For the final two weeks of my secondment I worked on the Burn Surgery service and took care of patients in the burns ICU and theatre as well as attending the out patient

clinics. The management of these patients was very challenging and required both a sound understanding of the principles of SIRS and resuscitation as well as the surgical skills for burn debridement and skin grafting, which I had the opportunity to perform in my second week on the unit.

Each week on Tuesday afternoons I attended the SpR teaching for Emergency Medicine which took the form of 2 formal lectures on relevant topics presented by the registrars as well as literature reviews and exam topic discussion.

I thoroughly enjoyed my experience in Cape Town. The city is a beautiful place to spend time and is stunningly situated. Having visited the townships and spent time in the city it is impossible not to be mindful that the experience I have gained is a result of the tragic level of violence in what is in parts a third world society, being tended to by a first world trauma service. The staff working in the unit were always welcoming and keen for me to learn but with the relentless stream of patients burn out was common and for many the move to private health care services was seen as a more attractive option.

I would like to thank the RCPSG for the opportunity the scholarship has given me to undertake this secondment. Travelling to Cape Town has allowed me to gain experience I would not have gained locally, and as a result I have easily exceeded the objectives both I and the College of Emergency Medicine had set for the secondment.