

## **ELECTIVE (SSC5c) REPORT (1200 words)**

A report that addresses the above four objectives should be written below. Your Elective supervisor will assess this.

I undertook a 3 week neurosurgical elective at the Royal London Hospital following a 4 week placement at the NIH also in neurosurgery. It was an interesting contrast working at a busy trauma centre with a much higher turnover of patients than my previous placements. There was a greater variety of general adult neurosurgical cases with subarachnoid haemorrhage and trauma of both the cranium and the spine as common presentations for evaluation. There are a number of unique features to the RLH as a result of it being a trauma centre including the advantage of a CT scanner directly in A&E which allows for rapid diagnosis of neurosurgical problems as well as the HEMS service. Many RTA's in the area get either blue lighted to the RLH or transported in by HEMS, with a predilection for young patients. It was quite sad to see many of the young patients who were now unable to walk or talk as a result of such sudden accidents. To contrast this, it was inspiring to see a case who had come in with a GCS of 7 and an emergency decompressive craniectomy, no doubt life saving, walking and talking within 2 weeks of the operation.

As part of the care for trauma patients there is a large multidisciplinary approach, with trauma patients being cared for by neurosurgeons, orthopaedics, specialist nurse teams and medics simultaneously. Following the resolution of their acute medical problems SALT and physiotherapist play a huge role in the rehabilitation of patients, with patients continuing with rehabilitation back into their repatriation to their home hospital.

The part of my elective I enjoyed most was by far having the opportunity to develop my surgical skills. I got the opportunity to participate in a variety of procedures and was able to develop my skills in suturing and wound closure, and even got to perform my first burr hole in a patient who had bilateral chronic subdurals and my first therapeutic lumbar puncture. One of the experiences I learnt most from, although not one of the experiences I'm most proud of, was dealing with a minor post-procedure complication as a result of a wound closure I assisted in. Post-operatively the patient developed a CSF leak from their wound most likely due to the fact that the deep dermal sutures were not tightly secure in some places. While the patient remained clinically well she required re-insertion of a couple of sutures. This was my first experience of a complication that was a direct result of something I have done. Although, not the worst complication that a surgeon will face, I was directly responsible for this complication and it definitely changed my practice. In addition to testing out my wound closures on practice models I decided that I would make a record of the tasks I performed in surgery, the potential complications as a direct result of that task and most importantly the patient outcome, in almost a self audit format. It's often easy as a student to perform a task under supervision and then change teams and not follow the same patient up especially as you often move before they are seen in outpatients so I thought this method would empower me to make a special effort to check on those whose care I have been involved in and look out for any recurrent themes of complications. Following this I have made my wound closures a lot tighter and subsequent cases have not had any complications.

One of the specialities which neurosurgeons rely upon, is radiology. Every Thursday morning there is a multi-disciplinary meeting with neurology, neurosurgery and radiology. Imaging is one of the most vital steps in modern day neurosurgery and expert interpretation of films and scans are vital. One such example I experience was in a case of a patient who presented with the classical symptoms of subarachnoid hemorrhage. Non-radiologist interpretation of the films in A&E determined her scans were clear. However, a consultant radiology view showed that there was very subtle evidence of intraventricular blood and that the findings suggested a vasculitic cause for the bleed. This expert opinion made a major difference in her management and highlighted for me the contribution of radiologists to the field of neurosurgery. In addition to this the multidisciplinary approach was extended to the neurooncology patients with weekly meetings at Barts on Friday mornings. Neurology, oncology, radiology and neurosurgery all meet to discuss newly diagnosed, or evolving patients with various CNS malignancies to provide a definitive management plan for the patient. This had the benefit of being directly followed up by an outpatient clinic so patients could be informed of the next step in their care.

I have thoroughly enjoyed my time at the RLH and wished that I could continue for longer. I have learnt a great deal from the doctors and patients here and really appreciate the patience which my peers and mentors have shown me in teaching me new techniques. I am now eager to start my neurosurgery academic block in August in order to continue to work on the skills I have developed in this short space of time.