

Elective Assessment- Neurosurgery at The Royal London Hospital

1. What are the common neurosurgical conditions in the UK and how similar are these to the rest of the world?

The common neurosurgical conditions that I came across on my elective placement, and which are also common in the developed world can be split into different categories;

Spinal- degenerative spine conditions resulting in disc replacement operations. This was particularly prominent and may be a reflection of the ageing population of the developed world. I saw cervical disc replacements and a laminectomy.

Neurooncology- although in the population as a whole primary brain tumors are not common, I experienced a large exposure to these conditions and witnessed the psychological effects that this has on the patient and their family. I became more familiar at looking at brain scans and feel this has helped to alleviate some of the anxiety I feel when faced with such a scan. I have learnt to appreciate the different types of brain tumors such as Gliomas- astrocytic tumors, Oligodendroglial tumors, and Glioblastomas, as well as recognise meningiomas. I also saw even rarer conditions such as Ependymomas and a Dysembryoplastic Neuroepithelial Tumor which helped to broaden my knowledge.

Trauma- this is a common presentation of neurosurgical patients. This is particularly relevant at The London as it is a major trauma centre, incorporating the Helicopter Emergency Medical Service (HEMS).

The above conditions are seen in the developed world, in addition to the developing world, even though the access to treatment may be less, however, there are some conditions that are more prevalent in the developing world. These include cerebral abscesses from infections such as tuberculosis. Additionally, HIV and opportunistic infections such as Toxoplasmosis occur more often in developing countries, as there is less availability of anti-retroviral therapy.

2. How is neurosurgical healthcare provided throughout North East Thames Trust?

In North East Thames Trust Neurosurgical care is provided by Tertiary centres which are hospitals that accept referrals from smaller hospitals that are not specialised in that particular services and do not have the facilities for that service. The Royal London Hospital is a tertiary centre and is referred patients from Newham and Homerton hospitals. Additionally, as mentioned above, HEMS, when necessary will take a patient that needs neurosurgical intervention to The Royal London.

3. What are the risks of neurosurgery?

All surgery has risks, and neurosurgery does not differ in this respect to other types of surgery. For example in all surgery, there is a risk of infection, bleeding, pain, failure of the surgery, revision of the surgery, anaesthetic complications and death.

However, neurosurgery has other complications which are specifically related to the type of surgery. For example paralysis from spine surgery, speech disturbance or risk of seizures from brain surgery, as well as any loss of higher function. Ataxia may result from cerebellum surgery. These risks have to be weighed up against the risks of not doing the surgery.

4. Experience working within a neurosurgical environment and reflect

My elective placement has been a prefect opportunity for me to gain exposure to an extremely interesting and varied field, and has allowed me to achieve valuable experience in a very specialist area. I have been able to see operations and attend clinics that I was not able to during my time at medical school, even though I was very interested in them. Through attending clinics I learnt new methods of Breaking Bad News, and feel more prepared for when I will have to do it in the future. It has been a very enjoyable elective and as mentioned earlier I have become more familiar with looking at brain scans, helping to ease some of my previous anxiety associated with this task. I now feel that I have a deeper understanding of what it is to work within a neurosurgical team and have a better appreciation of the vast conditions that they deal with. I feel this elective has broadened my knowledge and helped prepare me for being a FY1, especially for when I have my Critical Care placement.