

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

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

Pathologies affecting central nervous system can be devastating and affect not only older patients but also those of younger age. Patients I met had various pathologies, which included: cerebro-vascular events, brain malignancies, degenerative spine pathology and developmental pathology.

Complex anatomy and physiology of the central nervous system makes surgical intervention difficult and demands precise planning and extensive intra-operative monitoring. During my elective at the National Hospital for Neurology and Neurosurgery I have seen new methods which were used to plan surgical intervention (Stealth Navigation) and help to minimise harmful side effects of surgical intervention.

Anaesthetic provision for such operations is complex. Firstly, positioning of a patient differs from normal as well as airway management which can be difficult because of limitations in neck flexion. Secondly monitoring and control of physiological parameters has to be adapted to surgical needs (e.g. awake brain surgery). Thirdly, in the postoperative period these patients require admission to specialised neuro-intensive care units where special monitoring is used.

As my elective took place in the UK, and I will be employed in the UK, I am not able to comment on any significant differences. However, I feel that I should mention that there were obvious differences when comparing neurosurgical care provision in the specialised hospital with other hospitals within the NHS. In the NHNN, I have seen patients with rare conditions (rare tumours of the central nervous system), which were referred to NHNN for a definitive treatment. I was amazed by the effectiveness of the system.

My involvement with different specialists. This placement allowed me to learn about specifics of neuro-anaesthesia. I learned more about airway management, and was able to practice the skills I acquired. While attending medical school experience has allowed to learn basics about neurology and neurosurgery, while this placement helped to understand extent of neurosurgery, observe complex cases which neurosurgical intensive care unit for daily ward rounds I was thought about specifics of monitoring and ventilatory support. I learned about specifics of intraoperative arterial blood gas and how the data used to deliver safe anaesthesia.

During my elective at the National Hospital for Neurology and Neurosurgery, I had a pleasure to help with a study, assessing new tool helping to predict morbidity and mortality in patients undergoing major spinal surgery. This has helped me to learn more pre-assessment of neurosurgical patients and risk stratification prior to surgical intervention. I learned that such

tools can help to modify surgery and anaesthesia to improve the outcomes.

Overall, this elective placement has helped me to learn more about neuro-anaesthesia and neuro-intensive care and helped to establish the rightness of my future career choice