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Surgical elective carried out in Melbourne, Australia at the Royal Melbourne Hospital:
A reflective account

From the beginning of medical school, I have been keen to pursue a career in surgery, with neurosurgery standing out as particularly compelling. I am deeply intrigued by the complexity of the neurovascular system and the extraordinary precision of neurosurgical practice, where meticulous interventions on the smallest structures can lead to profound improvements in patients' quality of life. Thus, I was delighted to be given the opportunity to undertake my elective placement at The Royal Melbourne Hospital in Australia, with the neurosurgical department.

Clinical:

My elective provided me great insight into the day-to-day life as a neurosurgeon across the wards, clinics, and operating theatres. My day typically began with ward rounds at 6:30am, where I accompanied the registrar and resident doctors to review patients on the neurosurgical ward as well as those in other areas of the hospital, including the high-dependency unit. During these ward rounds, the team would discuss key aspects of the patient's care such as surgical indication and discharge planning. Following ward round, we attended a meeting with the head of the department to review patients scheduled for theatre that day and address any urgent concerns. After this, I had the opportunity to either observe procedures in theatre or attend outpatient clinics.



Over the course of my placement, I attended a wide range of surgical procedures from laminectomies to colloid cyst resection. I was awed by the intricacy of these operations, with surgeons often working at a microscopic level to achieve the highest degree of accuracy while preserving vital structures of the central nervous system. One case that particularly stayed with me was of a young girl with a large arteriovenous malformation requiring resection. The procedure was long and technically demanding, with significant blood loss. Throughout the operation, a multidisciplinary team worked seamlessly to maintain haemodynamic stability and manage transfusion requirements, highlighting the importance of coordination and communication in such high-stakes settings. It was remarkable to witness this level of teamwork in action, and the patient went on to recover well. This case, more than any other, solidified my passion for surgery.

Furthermore, I was able to witness long-term management of surgical patients in outpatient clinics. These patients would be reviewed 6 weeks after their surgery to assess

outcomes and need for further follow-up. I also attended clinics for patient with chronic neurosurgical conditions, such as Neurofibromatosis type 1 (NF1). Unlike most other neurosurgical patients, who would be discharged from the department once they were reviewed, these patients are seen on a regular basis to review the condition and screen for any new symptoms or pathologies, highlighting the continuity of care in some instances, even in a very specialist department.

Project:

During my elective, I came across a very interesting and rare case of a patient who had presented to the department with worsening chronic neck pain and dysphagia and new-onset shoulder pain. A pharyngeal perforation was detected due to metalware erosion 5 years after an anterior cervical discectomy (ACDF) procedure. The patient was treated with conservative management due to risk of jeopardising spinal integrity by removing metalware. With the help of my supervisor, I conducted a systematic review looking for articles with similar case presentations of delayed pharyngoesophageal injury after ACDF. After screening, we established 25 articles for review including case reports, case series, and systematic reviews. These studies yielded results from patients presenting with complications between 1 month and 25 years after ACDF, most commonly oesophageal and pharyngeal perforations were detected. Removal of metalware was indicated in most cases, resulting in good outcomes, although some patients did experience dysphagia.

Melbourne:

My time in Melbourne was truly memorable and will stay with me for years to come. The city offered a vibrant social scene, with plenty of events to build meaningful connections. I found the experience to be an invaluable opportunity to gain insight into a healthcare system on the other side of the world, allowing me to reflect on both its similarities and differences, and ultimately strengthening my interest in pursuing work abroad during my career.

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