



Neurology and Neurosurgery Senthooran Kanthasamy MBBS, BSc. Barts and The London SMD Elective Report

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Sponsors:

I would like to thank the Enid Linder Foundation and the Vandervell Foundation for providing my with an elective bursary in order to undertake this particular placement in Chennai, India.

Learning Objectives

- Compare and contrast the patterns of neurosurgical conditions that present within a neurosurgical department in India in comparison with that seen within one in the United Kingdom
- Compare and contrast the delivery of neurosurgical care within India in both a private and government hospital compared to how this occurs within the NHS in the United Kingdom
- Explore the impact of medical tourism from international patients on the delivery of healthcare to the local population and discuss the current conflicts between the two sectors
- Describe what particular communication skills and/or other skills you have attained during your time in a different environment which you will bring forward to adapt to life as a Foundation Year doctor.
 b.) Reflect on your experiences during your time in a busy neurosurgical department on your aspirations of choosing a career in neurosurgery.

Reflection:

I undertook my elective placement in the Apollo Hospital, Chennai and Apollo Specialty Hospital, Chennai to view both aspects of neurology and neurosurgical care within a leading healthcare centre in both Tamil Nadu and the rest of India. It is currently the largest, and foremost private health centres within the whole of India, delivering care within all fields of medicine at a level comparable to what is seen within the West. Established in 1983, the main hospital itself has 690 beds and covers over 60 different specialities, all of which are headed by internationally trained physicians who have travelled across the world in order to hone their own skills. As a result, this particular hospital has been a pioneer for many surgical and medical interventions, both within India, and across the world.

Within the field of both neurology and neurosurgery, the care is exemplary, with the Apollo Hospitals in Chennai being voted number 1 in the state for neurological and neurosurgical care within Tamil Nadu, and equally one of the top 5 within India itself. It was clearly evident during my time here that the approach to patients by medical teams looking after these particular patients were excellent and patients truly did receive optimal care akin with top neurological and neurosurgical centres within the United Kingdom.

What struck me the most were the different presentations of patients that were seen during everyday ward rounds and case lists. Many conditions that I was able to see during my time in Apollo Hospital were something that would normally be confined to the textbook when observing the range of patients during the UK. Patients tended to present to the doctors at a much later stage than what would commonly be seen within the UK and this may reflect two aspects of the serving population in India: 1.) the cost of seeking medical attention early on and 2.) the potential health education that patients may not necessarily have to identify problems early, and seek medical attention. As a result, patients that were seen on initial presentation were much more advanced in nature.

Many patients who presented within both Apollo Hospitals approached medical attention much later than what would be seen in the United Kingdom. As a result, many patients are advanced in their disease state and as such, have an vast array of symptomology. Neurology presentations within India have more of a preponderance for acute infective conditions such as tuberculous encephalitis, bacterial and viral encephalitis with secondary vasculitis. Comparatively, the UK has more chronic presentations of neurological conditions, typically Parkinsons' disease and dementia.

On the neurosurgical side of things, both acute presentations are very similar between what is seen in Apollo Specialty Hospitals and The Royal London Hospital for example, both excelling in the field of head injury. Traumatic brain injury is rife within Chennai, especially with amount of cars and automobiles which do not follow typical rules. As a result, many cases appear on the neurosurgical table, resulting in a wide range of subdural and extradural haematoma evacuations.

What differs between the two countries in presentations are the presence of much more advanced neurological malignancies which present within India compared to the UK. What allows malignancies to be picked up earlier is the presence of the General Practitioner in the UK, which can identify key red flags and immediately refer these patients to neurologists and/or neurosurgeons, allowing a safety net for these patients to be caught early. In India, the reliance is heavily on the patient being proactive and actively seeking medical help. Patients typically present later and delay medical intervention.

The grade and resources at an institution massively influence the influx of presentations The Apollo Hospital. Many difficult cases are seen within the hospital, and require thorough investigations. It was natural for a number of cases to not have a diagnosis. Every patient was extensively investigated with good quality MRIs, regular discussions with a multidisciplinary team (involving pathologists, electrophysiologists, neuroradiologists). I particularly enjoyed thinking from first principles in such cases and the ongoing research into literature for case reports to help with the management, although it was overwhelmingly complicated at times.

I had exposure to patients that came across from all around the world as well as those that reside within Chennai itself. Indeed, Chennai is currently regarded as India's health capital, with an influx of foreign tourists who come into the city solely for the purpose of seeking medical treatment. To confer with this, I had the opportunity of seeing many patients spanning across the world from within different states of India itself, to Nigeria, Oman, Ireland and finally from Australia, who all came to be seen by consultants within the institutions. I wanted to explore whether this indeed ended up impacting on the local population, but in reality, this was not the case as many of those that can seek medical attention at Apollo General Hospital were well to do and could afford the expenses. The majority of the population of Chennai however were not served by this particular hospital and would therefore have to seek medical attention from the free from the point of delivery government hospitals, which work to a similar

way to the NHS in the UK. The delivery of care however is not as optimum compared to Apollo Hospitals or those seen within the NHS itself.

My time in Apollo Hospitals and in India has provided me with access to an area of medicine and surgery that we do not get a lot of exposure to at medical school and for me, this has allowed me to explore both areas of medicine which I have aspirations to undertake a career in, as well as see some truly fascinating cases. The doctors and medical professionals at Apollo Hospitals were very welcoming and I cannot thank both Dr Arulselvam and Dr Chandrasekar for being kind enough to get me involved within the team and to see how things are done within a pioneering Indian institution. Given the highly specialised nature of my chosen areas during my elective, I cannot say that there are key general transferable skills for my foundation posts, but being able to brush up on my neurological examinations as well as approach to patients, many of whom speak English as well as the native Tamil, allowed me to further enhance my history taking, as well as use of non-verbal cues in order to ascertain some of the history.

All in all, my time here has given me a greater insight into whether a career in this discipline would be right for me, and has definitely opened up my aspirations of doing a training stint abroad in order to enhance my medical skills. I would like to finally thank Dr M. Muralidharan for making this all possible for myself and ensuring that my time in the Apollo Hospitals, Chennai ran as smooth and enjoyable as it did. Finally, I would like to thank the Enid Linder Foundation and the Vandervell Foundation for providing me a bursary to undertake this opportunity. Their support financially ensured that I was able to get experience in such a well-established hospital in a different part of the world, which would not have been possible otherwise.

Appendix













