I. SALEHI

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Year 5 Medical Elective

Singapore General Hospital - Anesthesiology

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I firmly believe that international exposure to different cultures and medical practices to be an important part of a successful and fulfilling career; I have been keen on exploring international opportunities in graduate and post graduate medical training as well as humanitarian medical work. This is why I have decided to do a two part elective placement in Singapore and in Thailand.

During my anesthesiology placement at Singapore General Hospital (SGH), I was hoping to gain a better understanding of the medical system and the training program as well as gaining an appreciation for the many facets of a career in the field. I also hoped to further practice my skills in airway and circulation management and further enrich my knowledge of human anatomy, physiology, and pharmacology all of which are critical to the practice of anesthesiology.

From the first day of being introduced to my tutor Dr Ruben and from our first conversation regarding my objectives I was assured that he would help me meet and in fact go beyond these objectives. I began my first day under the direct supervision of Dr Ruben where I observed a lung lobectomy and drainage of an empyema. During both operations I saw for the first time the use of a double lumen endotracheal tube. I was extensively taught by Dr Ruben regarding the use of the double lumen tube to isolate and ventilate one side of the lungs. On the same day I was asked to join the Neuro ICU team to observe a percutaneous tracheaostomy.

I found this to be the norm that I would get called to observe various procedure performed by anesthetists around the hospital. There were several factors that led to this. First, the keen attention of Dr Ruben to provide me with a complete overview of the speciality as I had asked for; second, the shear variety and volume of cases that were handled at the institute; and third, the sense of professional spirit of goodwill and fellowship which I found permeates through the anesthesiology department at SGH.

On the next day I attended the burns ICU which I found to be quiet interesting. It was impressive to see the shear ability of SGH to perform as the regional center for burns patients. There were many empty beds which in the past have housed victims of earthquakes, bombing, and other disasters in the region. At the time of my visit there was 1 burn victim from neighbouring Indonesia. The consultant in charge gave me a comprehensive picture of the complexities involved in the multidisciplinary care required by such patients and the services that the burn ICU provides.

I spent the following day in urology operation theaters. Going between the 3 theaters I managed to provide most of the patients on all 3 lists with intravenous access as well as endotracheal or laryngeal mask air ways under supervision. I also made my first successful attempt at placing an arterial line and giving a spinal anesthetic to a patient. After the lists were finished I spent the rest of the day watching a radical prostatectomy in a robotics theater for the very first time. On the following day among other things I was called to observe the administration of supraclavicular nerve blocks for vascular surgery on the lower arm.

I started the second week of my attachment as with the first, joining the neuroanesthetist Dr Darren Koh in the interoperative MRI theater. The procedure, insertion of an ommaya reservoir for delivery of intrathecal chemotherapy required to treat a patient with CNS involvement of acute myeloid leukemia. This was an excellent learning experience for me as neuro anesthetics is my particular area of sub-interest in the field. Prior to entering the theater I had to complete an MRI safety course which re-familiarized me with the working of the MRI machine and the strict safety rules. As I followed Dr Koh and his trainee I began to appreciate the many safety precautions that were necessary in order to make sure everyone in the room was safe and the procedure went on smoothly and the special role of the anesthetist. Dr Koh provided me with a basic understanding of what the job of a neuroanesthetist involves, that is keeping the patient's brain as calm as possible for the surgeons to complete their job without any complications. With respect to this matter we discussed various methods used to optimally perfuse the brain without causing vasodilatation and the importance of keeping optimal intracranial pressure (ICP) and various ways of managing raised ICPs.

On the same day I also spend several hours with Dr Ruben in cardiothoracic theaters. This was also a very useful experience as Dr Ruben provided a running commentary and teaching on coronary angioplasty bypass graft (CABG) surgery. We discussed the anatomical and physiological concepts underlying the procedure, the process of stopping the heart, and the workings of the heart-lung bypass machine.

Also as part of my placement I spent a day in the surgical ICU where I gained an appreciation of the complicated task of anesthetists in the management of critically ill surgical patients often with multiple organs failed or failing. I observed the placement of various invasive monitoring and supporting devices and discussed the topics of hemodialysis in details with Dr Chee. I also attended the ICU grand rounds, both weeks, where I heard about the interesting current cases in both surgical and neuro ICUs.

I spent my last full day at SGH at the pain management center under the supervision of Dr George. Here for the first time I saw injection of botox for chronic pain caused by muscle spasm as well as sacral epidural steroid injection for control of sever perineal pain in post TURP operation patient. I spent the afternoon in clinic where I saw a slew of interesting patients presenting with post trauma and post-op and post chemotherapy neuropathic pain as well as diabetes related peripheral neuropathy. Dr George and her knowledgeable staff discussed the various multimodal and multidisciplinary approaches used to treat chronic pain. I found the day to be very intellectually stimulating I have personal research interests in the field of chronic pain management.

All in all my two weeks placement at SGH anesthesiology, under the supervision of Dr Ruben, provided me with a great look at the breadth of the speciality, its subspecialties as well as showing me some interesting an rare procedures which I had never had the chance to see in the UK. My experiences have provided me with a much more clearer of the crucial role that anesthetists play in the hospital in management of patients in the operation theaters as well as in the intensive care unit. During my placement I have met various consultants and

trainees all of whom have been extremely pleasant and professional and keen to teach me their craft and provide me with ample teaching and learning opportunities. I am very excited about my 4 month rotation in anesthetics in my FY1 year and the future prospect of entering anesthesiology training. I owe a debt of gratitude for this renewed excitement to Dr Ruben and the entire anesthesiology department at Singapore General Hospital.