Natasha Rodgers: Trauma at the RAH

I designed my elective to explore a branch of critical care and infectious diseases (ID). I spent 4 exciting weeks in the Royal Adelaide Hospital (RAH) in the trauma department and then 3 illuminating weeks in the Liverpool ID department.

I chose the trauma team at the RAH as I really enjoyed spending time with the on-call anaesthetist and thought (and still think) that critical care could be my calling. The RAH is a brand new hospital with state of the art facilities: for example the resus room has eight bays, all with X-ray machines as standard, the CT scanner is metres away and there is a dedicated elevator for helipad, resus room and theatre access. The trauma team is a sub-team in the Resus room of the RAH's Emergency Department; they manage any trauma calls and help out with the medical resuscitation calls that come through. At the heart of the trauma team are the trauma registrars and fellow, with whom I spent all my time. They do the primary survey of any trauma patient, lead the resus and stabilise the patient before getting the patients' any investigations they require. I was given a bleep and was fully integrated into the trauma team.

Everyone was friendly, excited to teach and get me involved. I was expecting to be mostly observational but I was involved with many patients, doing bloods as patients came in the door to doing the follow up, tertiary surveys forty-eight hours later. I was particularly involved once the patients were more stable, for example learning how to clean out wounds, suturing and stapling.

Education was at the heart of the trauma team: Wednesday mornings were protected teaching time for all the registrars and bleeps were handed in for 6 hours. Long cases were presented from the week allowing everyone to learn about the more interesting cases as well as extensive radiology review time. I wasn't expecting to learn much about radiology but the trauma team prided themselves on being part-time-radiologists due to the need to review radiology in the department quickly themselves. Hence I gained valuable teaching particularly in looking at fractures and dislocations, organ contusions and the more rare signs such as the Mount Fuji sign, indicative of tension pneumocephalus! There was also further practical teaching for registrars and students only, covering FAST scans and simulations whilst I was there. And of course every case that came into the department was educational…

I saw an incredible range of pathologies including car/bike accidents, burns, stabbings, self-inflicted wounds, work accidents and other accidental head injuries. Within my first hour of being within the department there was a builder with his neck sliced open after metal sheeting had fallen off a fork truck into him— I quickly learnt that I was less squeamish than I had worried and the quicker the trauma surgeons/on call anaesthetist depart when they are called to the department for a worrisome trauma call, the better your prognosis. Patients came in with surgical emphysema from head to pelvis, I heard the "crunch" associated with a pnemo-mediastinum and I saw the power of analgesia when every limb is broken. I was amazed at the strength of the human body and the will to survive—including a patient who, having been kicked by a cow, only appeared 4 days later with a large haemothorax as his wife thought he needed assessment for his shortness of breath! I also observed a great number of technical skills applicable to anaesthesia including intubating and catching when the tube is placed past the carina in the lung, the management of patients with airway burns, why not to give too much naloxone(!) and learnt how to do limb and ring blocks.

The first day, I was taught for what to look for in a primary survey— the important things not to miss that could kill a patient in 20minutes but you could also reverse before the patient's demise—eg cardiac tamponade, tension pneumothorax. I think the skills I learnt from watching the primary surveys of traumas of varying levels over the four weeks will really help guide me during my final year of medical school and into the future as a foundation doctor and future anaesthetist. The RAH was an absolutely fantastic elective— I am very grateful to the AAGBI for their generosity in supporting this opportunity.

References:

Image acquired from: https://www.healthcareit.com.au/article/new-royal-adelaide-hospital-opens-cio-talks-clinical-collaboration-and-'cool'-tech