Elective Report 2014 - Adult and Paediatric Anaesthesia

The Royal London Hospital

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Elective Objectives

1) Describe the pattern of disease/illness of interest in the population with which you will be working and discuss this in the context of global health

The Royal London Hospital is a tertiary care centre in East London. East London has an extremely diverse ethnic population. The Royal London also offers health care to some of the most deprived areas of the UK. Impoverished areas often display a tendency towards some damaging health behaviours, such as smoking, poor eating habits, and lack of exercise. These behaviours create a population with a high number of co-morbidities which complicate patient care. Examples of these are diabetes, ischaemic heart disease, renal disease, and peripheral vascular disease. These diseases were extremely common amongst patients who were going for surgery, and in my time in adult anaesthesia I was constantly seeing complicated patients who were difficult to obtain IV access in, difficult to manage the airway in, and required special monitoring throughout their procedures. Comparing my experience in the Royal London to my previous anaesthetics rotation in Colchester, I can confidently say the patients in the Royal London were far more complicated.

2) Describe the pattern of health provision in relation to the country you will be working and contrast this with other countries or with the UK

The NHS provides free health care to all citizens and legal residents of the United Kingdom. This is in contrast to many other countries in the Western world that provide a similar standard of service, but only partially subsidise the cost of care to varying extents. The care provided by the NHS is designed to be extremely cost-effective, relying heavily on documented evidence to determine what treatments and investigations are made available to patients. However, the sustainability of this system is a frequent topic of debate at present.

3) Health-related objective: I would like to learn more about management of airways and fluid balance

I received some excellent teaching from some very experienced consultants during my time in the Anaesthetics department. Whilst I had fewer opportunities to practice airway skills and cannulation in adult anaesthetics than I would have like, it was largely due to the very complicated patient population I was exposed to. As a result, I had the opportunity to witness the monitoring and management of very ill patients who had very special anaesthetic needs. I also had the opportunity to witness the resuscitation of a few very unwell patients, using fluids and inotropes. I feel fortunate that I was allowed to witness the speed at which a patient can haemodynamically deteriorate, but also the speed at which they can approve using appropriate management. This experience will, hopefully, give me a better feel for what I'm doing when I am faced with acutely unwell patients as an FY1 doctor.

- 4) Personal/professional development goals. Must also include some reflective assessment of your activities and experiences.
 - a. I would like to gain more experience in Anaesthesia and take up opportunities to perform airway management procedures.
 - b. I would like to learn more about acute care.
 - c. I would like to perform an audit or project

The professional development goal I set myself was to contribute to an audit or project during my time in the department. I am happy to say I was given the opportunity to contribute to a national anaesthetics audit. It was quite a labour-intensive project due to the nature of the audit, but I have developed a far better understanding of the audit process and was very happy to feel like a member of the team during the audit process.

In summary, whilst I did not have the opportunity to experience working in health care in a different country, I feel that I benefitted greatly from carrying out my elective placement in the Royal London. I gained a lot of valuable experience in some necessary practical skills such as airway management, cannulation and insertion of airway adjuncts. I learned a great deal about the immediate management of the haemodynamically unstable patient, which has improved my confidence about starting FY1.

Spending my time in the anaesthetics department also gave me the opportunity to witness lots of exciting and highly-specialised surgical procedures that I would not otherwise have had the opportunity to see. For example, I was present for maxillofacial surgery lists, hand surgery lists and ophthalmology lists. I was able to see some very exciting and complicated surgeries, and I'm thrilled to have had that opportunity.

Whilst I was in Paediatric anaesthesia, I spent a lot of time in lists which had rapid patient turnover times e.g. EUAs and dental lists. These young patients were usually medically well, apart from the complaints that brought them to theatre. As a result, I was given frequent opportunities to cannulate and practice airway management. I am grateful to have been able to improve upon these skills before starting FY1 and am proud to be able to say I have cannulated a 29-day old neonate!

Elective Report 2014

Radiology - Royal London Hospital/ St Bartholomew's Hospital

Describe the pattern of disease/illness in the population with which you will be working and discuss this in the context of global health.

Dividing my time up between the Royal London hospital and Barts was very interesting as the patient populations were clearly differing. The scans we were requested to interpret in the Royal London were usually trauma patients or acutely unwell patients who had presented to A&E. Tuberculosis was frequently a differential diagnosis when interpreting scans. In contrast, many of our scans from Barts were follow-up scans for oncology patients who had been referred to the tertiary oncology centre in Barts from various other hospitals.

I undertook the first part of my elective in the Radiology department of the Royal London Hospital. I was interested in undertaking a placement in radiology as I have always had an interest in medical imaging. I had heard exciting things about interventional radiology as a specialty, but had never really been given the opportunity to undertake any radiology placements in medical school. I decided Barts and the London would be a good place to do my placement. I thought I would receive exposure a wide range of images to interpret, from trauma and acute patients in the Royal London hospital, to complex oncology patients in Barts.

One of my objectives was to learn more about acute care. I was fortunate enough to witness some acute patient management situations within interventional radiology theatre, where patients required immediate resuscitation. I feel I benefitted greatly by witnessing the rapid deterioration of a patient, and the short space of time in which this can happen. I have seen how quickly and efficiently the team can work together, and how rapidly the situation can turn critical. I'm very thankful to have seen these cases before starting my FY1 job this summer, and feel slightly more prepared for similar situations in the future.

Amongst medical students, radiology generally has a poor reputation as a specialty. Radiologists are subject to certain stereotypes, and it is widely believed that they never see patients and spend all of their time in dark rooms. From my experience on this placement, I can happily say this is not the case. The radiologists most definitely do spend lots of time with patients when running ultrasound and fluoroscopy lists. Even when they're "in dark rooms" reporting CT scans, they are often called out to administer contrast or perform an impromptu CT pneumocolon.

Overall I found my time in the Radiology department to be a delightful experience. I was excited to go in every single day, and I was amazed by how much I'd learned in two short weeks.

- 5) Personal/professional development goals. Must also include some reflective assessment of your activities and experiences.
 - a. I would like to learn more about clinical radiology

First of all, everyone in the Radiology department was exceptionally welcoming. My timetable was packed out with a wide variety of activities, so that I would receive exposure to lots of different areas of radiology. I shadowed radiologists in general CT reporting, neuroimaging reporting, fluoroscopy, ultrasound and interventional radiology.

The teaching I received was very attentive and I learned a fantastic amount about interpretation of medical images in a very short space of time.

I was also very excited to see how much medical knowledge is applied when interpreting medical images. Not only do radiologists need to have an extremely indepth knowledge of anatomy, but also of physiology and pathology, in order to piece the clinical picture together with the features seen on the scans. It is the radiologist's responsibility to look for signs on the scans that are consistent with the clinical picture, but also to look for any other abnormalities that may be causing or contributing to the clinical picture. For example, a patient could present in A&E with vague clinical symptoms such as abdominal pain. An abdominal CT scan did not show evidence of appendicitis or ovarian torsion, however some free fluid in the pelvis was noted which strongly suggested that another disease process was taking place.

Interventional radiology was a speciality I had never been exposed to, and I found it a unique theatre experience altogether. The work is much more delicate and precise than that of the other forms of surgery I had witnessed before. Often the patients are not under general anaesthetic, which gives the interventional radiologist the interesting experience of being able to communicate with the patient whilst the procedure is taking place.