JAMAL OMARA RADIOLOGY

Elective Assessment – Short Report on Objectives

Objectives:

1. Spend time within an interventional radiology suite and become familiar with the day-to-day running of the department
2. Understand the various roles of team members within the department
3. Use my time in the department as an opportunity for career exploration as an interventional radiologist
4. Take part in well-supervised practical activities and also improve knowledge of anatomy

**Objective 1**

A typical week within the interventional department consisted of Monday morning in theatres, Tuesday on call for emergencies (with Urology cancer MDT), Wednesday morning CT guided biopsies (with Chest cancer MDT), Thursdays reporting and research, Friday morning theatres and afternoon reporting and research. Other activities included sales rep meetings, audit meetings, research conferences.

The diary of activities gave me a very wide experience of how the department runs. Interventional radiologists do not have their own inpatient lists in general. The department is often closely tied with the Vascular Surgery department. This means that a dual approach to care can be provided. Patients are referred to Vascular surgeons via clinics or inpatients and the surgeons will meet with the interventional radiologists to take over or assist with certain procedures depending on the expertise within these particular departments. At the moment the care provided via interventionalists is not well streamlined and could be better accessed in future.

Something i was most impressed with was the sheer variety of procedures (both vascular and non-vascular) that the interventionalists carry out. During my time i scrubbed in on numerous renal vascular bleeds, acute GI bleeds, aortic stent insertions, hepatobiliary intervention, embolectomies, lung tumour biopsies, para-aortic node sampling, acute splenic artery embolisation, abdominal paracentesis and cerebral aneurysm coiling. These are to name just a few. I was thrilled to be allowed to assist under very close supervision with many of these procedures.

Another issue i uncovered during my time there was that i did not think that clinicians at large were fully aware of the scope of expertise in the interventional department, and therefore the level of referral is not adequate enough. I think that interventionalists have a responsibility to market their services more widely in order that more patients may benefit. Very often these procedures offer less invasive alternatives to standard surgery, and so it is better to work in conjunction with the surgical team and treat patients appropriately.

The department consisted of dedicated suites with specialised equipment, with software which is continuously being updated. I was introduced to the operational technicalities of the machinery involved, as well as the wires and catheters used for vascular intervention. Quite often i noted that the sales rep would be present in the theatre during operations, and were acting as a specialist source of information regarding their surgical implants (i.e. aortic stents). They were able to answer very specific questions regarding measurements and off-licence applications which was useful to the interventionalist considering that each prosthesis is individually tailored the each patient. So an

important characteristic of an interventional radiologist is to be able to work closely with various types of professionals at the forefront of technological advancement, to provide the best patient care.

**Objective 2**

There are various specialist team members which work in an interventional suite who are not encountered elsewhere in the hospital. Firstly, there is a specialist administrator whose job it is to order and monitor the equipment needed for various procedures. They are directly in contact with the pharmaceutical company and can order particular sizes as required. They also may take responsibility for patient surgical lists too in some cases.

Specially trained radiographers are needed to operate the C-arm fluoroscopy unit used to take real-time images. These team members are essential as they have the technical expertise to be able to manoeuvre the patient table, inject contrast medium, and act as specialist scrub nurses.

Very often vascular surgeons are required for the arterial cut-down and stitching at the start and end of procedures. Increasingly, vascular surgeons are becoming skilled with interventional procedures in their own right.

**Objective 3**

I was able to explore the possibility f interventional radiology as a possible future career. I engaged in very informative discussions with the consultants in the team who highlighted the advantages and challenges of this work. Contrary to the work of other radiologists, there is alot of on-call acute work in interventional radiology, and work life balance can be difficult. However, given the close ties to pharmaceutical companies it is possible to be given the opportunity to travel all over the world to attend conferences and take part in novel research. There is the possibility to sub-specialise in a very wide variety of areas, and also private practise is considerable. However, the consultants all stressed the importance of achieving a high standard in generic radiology training, as a good grasp of anatomy is even more vital when doing procedures. I realised that only a minority time is spent in theatres, and actually a lot of time is spent in MDT meetings advising various clinicians on what services you can offer. Also there is still the commitment to report on studies, and carry out other imaging modalities such as ultrasound and MRI. The scope of knowledge required is what attracts me to the discipline. Radiologists also need to have a very good grasp on basic medicine; in fact the better your experience as a medic the better your reports to your colleagues will be. I also found that radiologists have a lot of knowledge of histopathology, as they need to understand the microbiological causes of the disease states they are reporting.

**Objective 4**

I was able to take part in some procedures during my time, and even practise some of them enough times to feel proficient enough to practise independently in the near future.

The interventional radiologists gave me a well supervised training period of some basic procedures, and iwas then allowed to carry out these procedures under supervision on my own after i had shown i was safe to do so. Some procedures were more demanding and i was not allowed to carry them out

at all, such as arterial cut-down, which is mostly done by vascular surgeons. This reaffirmed my decision to specialise in a career which has the opportunity for a lot of practical work.