

## Elective Report

### 1. Understand common conditions in cardiology at the London chest Hospital.

I was at the London chest for 6 weeks in the cardiology department, it was a great learning experience. I came across a vast array of common cardiological conditions as well as rare conditions due to it being a tertiary centre. I attended the chest pain clinic consisting mainly of patients with atherosclerotic disease, as well as the heart muscle clinic where I came across patients with cardiomyopathies. I spent a great deal of my time on the wards where I became very good at differentiating between systolic and diastolic murmurs, something which I had previously had great difficulty with. I also came across patients with valvular pathologies. It was an insightful 5 weeks and I learnt how to manage common cardiology conditions.

### 2. To learn about the healthcare system and compare and contrast the healthcare system in the UK with other countries

During my elective I was mainly carrying out FY1 duties which involved clinical duties such as venepuncture, cannulations, arterial blood gases, conducting ward rounds as well as a great deal of administration such as TTA's, referrals, arranging scans. The healthcare system is made up of a hierarchy with junior doctors organising and collecting information to hand over to more senior members of staff.

Universal healthcare provision is provided for all the in the UK, funded by the taxpayer this differs in other countries. In the UK complex procedures are provided for free for all and it is satisfying to see that patients that would normally be able to afford expensive state of the art procedures at the London chest could access these facilities.

### 3. Understand indications of Transaortic valve replacement (TAVI), and benefits of TAVI as opposed to open surgery

Since my consultant is involved in a great deal of interventional cardiology I spent a lot of time in the cardiac catheterization lab, where I was able to witness and scribe in the event of an acute myocardial infarct. I also observed many angioplasties as well as being introduced to the novel minimally invasive method of carrying out valve replacement transcatheter aortic valve replacement (TAVI). TAVI was introduced in 2005 allowing aortic valves to be replaced via the femoral arteries or in some patients through the transaortic route. It has made a big advancement in medicine as it is less invasive not requiring patient to be put on bypass and results in quicker recover and shorter hospital stays, risk of infection with TAVI is very low with only patient developing bacterial subendocarditis in the past 9 years. TAVI is indicated in patients with severe aortic stenosis who would otherwise not be fit for surgery, it is thus extremely useful in treating the vast proportion of elderly patients in whom aortic stenosis is rather common. It is also a good alternative in those who would not be able to cope with surgery.

### 4. Audit on acute kidney injury following TAVI

I became so intrigued by the TAVI that I became involved in research with my team on the effects of TAVI on kidney function. We postulated that TAVI would result in more effective renal blood flow hence being beneficial for patients with poor baseline renal function.

SAFA MAJID

However our findings show that infact patients were more prone to acute kidney injury possible due to contrast use. I will be working on the audit further and re-auditing after changes are made to the concentration of contrast and different types of contrast. I thoroughly enjoyed carrying out the audit, I have carried out an audit earlier this year on a smaller scale at a GP surgery where I was able to implement and make changes straight away to see improvements almost instantly. However on a bigger scale such as this it will take a few years at least to make changes and re-audit. I also submitted an abstract and we are awaiting the results (see attached copy of abstract).