

## **ELECTIVE (SSC5a) REPORT (1200 words)**

A report that addresses the above four objectives should be written below. Your Elective supervisor will assess this.

### **Discuss the radiological findings of prevalent diseases in Cyprus and discuss the impact on global health.**

Some of the most prevalent diseases in Cyprus include circulatory diseases, respiratory diseases and neoplasms. A study in 2015 found that 10.2% of Cypriots have diabetes, which costs the healthcare system around £1,835.31 per person annually. However, one of the most prevalent diseases that is of particular concern in regards to Obstetrics and Paediatrics is Thalassaemia Beta. It was reported that more than 1 in 10 (17%) of both Greek and Turkish Cypriots are carriers of the thalassaemia beta trait, with this disease being more prevalent amongst the Greek-Cypriot population. Whilst spending time in the radiology department in the Obstetric and Paediatric Hospital in Cyprus we had the opportunity to shadow the radiologists in different departments such as the NICU and the general paediatric ward. The prevalent diseases in Cyprus are similar to the UK hence we were familiar with a lot of the processes used here being the same ones as in the UK. The radiology department in this hospital is largely responsible for identifying any congenital defects in obstetric patients and premature neonates. We had the opportunity to go through some of the XRays of the premature neonates, where we learnt more about the use of Umbilical Artery Catheter and Umbilical Vein Catheter used in NICU. A UAC should lie in the aorta with an ideal position between T6-T10, while a UVC should lie at the junction of the IVC and right atrium, radiologically seen at the level of the diaphragm or just above (T8-T9). Their positioning is vital, thus the lines are secured and Xray scans are done frequently to ensure they remain in place. The need for a UAC and UVC should be reviewed daily and every 5 days respectively.

### **Describe the pattern of health provision regarding imaging in antenatal care in Cyprus in contrast to the UK.**

The antenatal care programme in Cyprus is similar to the one in the UK, with some notable differences. Pregnant women are offered their first appointment at around 8-12 weeks to have their first ultrasound scan and blood tests, along with discussing lifestyle factors, future appointments and any medication changes that need to be changes. The frequency of appointments is increased after 24 weeks. At this stage, a discussion with the midwife and the doctors is arranged to discuss the birth-plan. Women who give birth in a public hospital stay for 3-5 days. Notably most appointments are done by an obstetrician, rather than with a midwife for low risk women in the UK.

### **Discuss the public health screening measures taken in Cyprus to minimise prevalence of Thalassaemia, a common genetic disorder in the country, and compare the social implications of the disease with countries where this is less prevalent.**

An additional test that is mandatory in the Cypriot population, which is ideally done at the pre-conception stage, is the one for beta thalassaemia; pregnant women and their partners have to be tested to establish the likelihood of the baby being affected by this unusually common disease in Cyprus. In the case this is not done, this can be diagnosed antenatally using traditional methods such as amniocentesis, chorionic villus sampling, and cordocentesis. Noninvasive tests using cell-free DNA (cfDNA) from a maternal blood sample are also available in the market, but do not have a risk of miscarriage are currently, however this is not currently used in Cyprus. If the tests indicate the foetus is affected by beta thalassaemia appropriate counselling is provided and treatment can be provided accordingly.

### **Expand my knowledge in radiology in order to become more confident in this specialty, and appreciate the importance of this specialty in the management of other paediatric and obstetric conditions.**

I found this elective very useful and insightful considering we do not have formal teaching from radiologists during medical school. It was interesting to learn more about this specialist from the radiologist's perspective as they are the ones that can provide the most well-rounded knowledge when it comes to interpreting results such as X-Rays of neonates in the intensive care unit. Our mentor specified how a lot of details can be missed by the untrained eye, which I believe highlights the importance of having more radiology teaching from the radiologists, rather than radiology teaching from specialist consultants regarding their own speciality.