OBS + GYNAE

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School of Medicine and Dentistry

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ELECTIVE REPORT
SSC 5c

Elective Dates: 11-April-2011 to 27-May-2011

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Elective Objectives:

1. Describe the pattern of disease/illness of interest in the population with which you have worked and discuss this in the context of global health.

2. Describe the pattern of health provision in relation to the country in which you have worked and contrast this with other countries, or with the UK.

3. Health related objectives:
   - To experience all five aspects of obstetrics and gynaecology
   - Conduct an audit
   - Experience first hand clinical situations as a senior student

4. Personal/professional development goals:
   - Experience obstetrics and gynaecology to a higher level
   - Gain hands on experience
   - Reflect on the nature of the specialty and some of its conducts i.e. delivering a live baby vs termination.

1. **Describe the pattern of disease/illness of interest in the population with which you have worked and discuss this in the context of global health.**

Hypertensive disorders of pregnancy

During my elective at the maternity unit in Whipps Cross University Hospital, I came across many women receiving treatment for hypertension. This condition is diagnosed when systolic blood pressure is greater than or equal to 140 mmHg and diastolic blood pressure is greater or equal to 90 mmHg. Hypertension in pregnancy can be primary or secondary. Primary hypertension can be due to pre-eclamsia, pregnancy-induced hypertension, chronic (pre-existing) hypertension, postpartum hypertension. Secondary hypertension can be caused by renal impairment, cardiac disease and endocrine abnormalities. Most women will be asymptomatic, therefore identification of women at risk and routine measurement of blood pressure together with checking urine for proteinuria are vital. Nice guidelines outline the frequency of monitoring and management. The incidence of pre-eclamsia in the UK in women with one risk factor is about 15% and is a leading cause of maternal morbidity and mortality in the developing countries. In this country, maternal death is rare (0.85 per 100 000) possibly due to intensive disease management.

Pregnancy –induced hypertension normally affects women in their second trimester. It is distinguished from pre-eclamsia and eclamsia by the absence of proteinuria and other biochemical markers. PIH affects about 6% of pregnancies and is a predisposing factor for the development of pre-eclamsia (15-26%). Blood pressure normally normalises within 6 weeks post-delivery.

Pre-existing hypertension is diagnosed at booking and affects about 3-5% of pregnancies. This is on the rise because of an increasing obesity, unhealthy diet, lack of exercise and an older pregnant population. There is also an elevated risk of developing a pre-eclamsia.

Post-partum hypertension is a high blood pressure arising usually on the third or fourth day after delivery without markers of pre-eclamsia. It should be differentiated from a new onset of pre-eclamsia and pre-existing chronic hypertension.

Pre-eclamsia is characterised by a high blood pressure (BP ≤140/90), proteinuria (≥300 mg in a 24hour urine collection), abnormal blood results (raised uric acid, low platelets , high Hb), reduced uterine artery blood flow at 22-24 weeks. It affects about 10% of all pregnancies, whereas severe pre-eclamsia affects about 1% of all pregnancies. There are several risk factors for developing pre-eclamsia: increasing maternal age, multiple pregnancies, obesity, primiparity, and previous pre-eclamsia. The pathophysiology of pre-eclamsia is related to abnormal trophoblast invasion due to endothelial dysfunction and subsequent remodelling of maternal uterine arteries leading to placental hypoperfusion. Women present with headaches, blurred vision, nausea and vomiting, epigastric pain, oedema and exaggerated tendon

reflexes. If it is not detected, it may lead to seizures (eclamsia), cerebral haemorrhage, HELLP syndrome, DIC and renal failure.

Management involves warning a patient about possible symptoms, checking blood pressure and dipstick urine every two weeks with weekly blood tests. In the presence of severe proteinuria – patient should be admitted, blood pressure checked every four hours and 24 hour urine sent for Protein:Creatinine Ratio. Patient should be commenced on the antihypertensive therapy (Labetalol or Methyldopa). Ultrasound assessment of the foetus every two weeks is recommended. The only definite treatment is the delivery of placenta. The baby should be delivered immediately with increasing maternal symptoms, development of eclamsia, foetal distress or reversed umbilical artery flow.

2. Describe the pattern of health provision in relation to the country in which you have worked and contrast this with other countries, or with the UK.

Whipps Cross University Hospital is a NHS based health care provider in one of the most deprived areas of the UK. NHS hospital services are run and managed by NHS trusts, which make sure that hospitals provide high-quality healthcare, and that money is spent efficiently. They also decide on strategies for hospital developments. Apart from emergency care, hospital treatment is arranged through GP, dentist and optician. Treatment at NHS hospitals is free.

It is located in the London Borough of Waltham Forest. This hospital is over 100 years old and currently serves about 350 000 people. The population is cosmopolitan and ranges from very poor to very wealthy in England (5% and 30% respectively). The trust employs 3400 staff and provides services ranging from emergency care, maternity, outpatients, inpatients and day case services. The Trust invested £3 million to build a new maternity unit as the number of women delivering in this borough has risen to 5200 per year. Maternity unit has all necessary facilities to make delivery as comfortable as possible for new mothers and family members. The team is friendly and highly knowledgeable. It has a low risk area with bathing pools and a high risk area with two operating theatres. Antenatal care has several components such as preconception counselling, periodic assessment, patient education, psychological support, physical examination, laboratory tests and other specialist services. It is provided by midwives and consultants. In midwifery led care, pregnant women see both their community midwife and their GP for antenatal checks and usually alternate between the two. Expectant mothers are put under the formal care of a Consultant Obstetrician if they are a high risk of development of obstetric complications. In this case, their antenatal care will alternate between their community midwife and the Consultant.

I have chosen to compare health provision in the UK with that of Sub-Saharan Africa. Being in a well developed western country means that the provision of obstetric and gynaecological services is of a high quality. Every expectant mother will be supported and monitored throughout the pregnancy, and is guaranteed a hospital bed and expert care during the birth. Each couple affected by subfertility will receive up to three courses of IVF (if meeting certain criteria), and all HIV positive women will be treated. No woman is denied access to facilities. It is this level of care that is expectant in the western society, however, worldwide this is not so.

Sub-Saharan Africa has the worst track record for maternal care. Death rates amongst mothers are as high as 2000 deaths per 100 000 of the population. The problem basically stems from the lack of obstetric facilities and an insufficient number of trained healthcare professionals. In fact, a study by the Leeds based Nuffield centre examined the repercussions of these chronic staffing shortages and made several points. The lack of staff means that those that are available have a higher workload and have to perform tasks that they may not received sufficient training for, and round the clock emergency treatment is not always feasible. Trained professional frequently emigrate or enter private practice, thus their skills are lost or patients have to pay money they do not have. These countries rely on the foreign investments to help to establish a better health care.

3. **Health related objectives:**
   - **To experience all five aspects of obstetrics and gynaecology**
   - **Conduct an audit**
   - **Experience first hand clinical situations as a senior student**

At the start of my placement I was introduced to everyone in the team at the weekly meeting, this made me feel more comfortable and at ease. I was given a very detailed timetable covering all five aspects of Obstetrics and Gynaecology. I attended gynaecological oncology, urodynamics, emergency pregnancy assessment unit, maternal medicine clinics, antenatal clinics, colposcopy, fertility clinic, pregnancy loss clinic and foetal ultrasound assessment clinics. In addition, I spent two weeks on labour ward. I enjoyed seeing and participating in surgical procedures, such as caesarean sections, laparoscopic surgeries and hysteroscopies. I attended weekly multidisciplinary meetings (Perinatal Meeting, CTG and Journal Club) where the common problems, facing health professionals on a daily basis, were discussed in details to try and improve the care.

As one of my objectives for this elective, I have conducted an Audit. I looked at the use of antenatal corticosteroids in babies delivered by elective caesarean section before 39+0 weeks of gestation. The Royal College of Obstetricians and Gynaecologists published a new guideline regarding the reduction in neonatal morbidity and mortality in babies exposed to

corticosteroids antenatally. The purpose of the audit was to evaluate whether the health professionals were following the best practice set by the governing body. The results of the audit showed that, in general, clinicians followed the guidelines. However, the midwives were unaware of it and documentations needed to be better organised.

4. **Personal/professional development goals:**
   - **Experience obstetrics and gynaecology to a higher level**
   - **Gain hands on experience**
   - **Reflect on the nature of the specialty and some of its conducts i.e. delivering a live baby vs termination.**

I am very interested in Obstetrics and Gynaecology as a future career. Therefore, one of my main goals was to experience all aspects of obstetrics and gynaecology and to increase my knowledge and practical skills within this area. Although my fourth year firm was very good (Homerton University Hospital) I feel it was too short a time to devote to such a far ranging speciality.

During this elective I had an opportunity to participate in many procedures. My first week started on the labour ward, which was a very busy place. I witnessed several emergency deliveries necessitating either instrumental delivery or caesarean section. One of the highlights of my experience was assisting in Caesarean Section and delivery of a baby with shoulder dystocia.
I was given much opportunity to communicate with patients. I clerked patients in the antenatal and gynaecological clinics and was also involved with seeing patients in the antenatal clinic. This allowed me to further improve my communication skills with patients. There were plenty of opportunities to examine patients. I learnt to assess presentation, lie and engagement of the foetus and assess the liquor volume.

In my opinion, one of the biggest challenges in working as an obstetrician is to deal with mothers who sadly lost their baby in utero or shortly after or during birth. I saw my Consultant breaking the news in a very empathic and professional manner, comforting the grieving mother and at the same time giving her a hope that the next pregnancy will be successful.

The main focus of the placement was on the foetal medicine. I have observed senior clinicians counselling patients faced with complex and sometimes tragic diagnoses. I have been able to gain a hands-on experience in performing an ultrasound examination of the foetuses and it made me feel more confident in this field.

I was fortunate to attend the specialist teaching for ST1-7 doctors and attended the Conference in Foetal Cardiology held at the National Institute of Child Health. We also had an opportunity to go to the wards of the Great

Ormond Street Hospital and witnessed some breakthrough treatments for children.

Conclusion

I thoroughly enjoyed my elective placement and I am grateful for being given the chance for this experience. In particular, I would like to thank my Consultant for organising it and putting in so much hard work and passion. I have seen a wide variety of problems whilst gaining an invaluable insight into the National Health Service provision. I feel I have successfully completed the learning objectives as stated above.

This elective has affirmed my ambition to pursue a career in obstetrics and gynaecology.