OBS + GYNAE

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Elective report: Maala Nair

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Objective (1): What are the common obstetric and gynaecological (O & G) conditions in Ghana? How do they differ to the United Kingdom (U.K)?

Obstetrics and gynaecology is a highly broad and diverse speciality encompassing many different clinical conditions and presentations. This manifests even more so when one explores this field within a different country with a different patient demographic and this therefore, underpins the reason as to why I decided to undertake my elective in Ghana.

The time I spent in gynaecological outpatient clinics and in theatre clearly revealed to me that the clinical burden from fibroids or leiomyomata is far more significant in Ghana than what I have observed in the U.K. This is perhaps unsurprising considering fibroid propensity in those of African or Afro-Caribbean descent, but I was nonetheless surprised by the size of the fibroids, which often reached the dimensions of a 20 week gravid uterus, if not more. In the U.K the primary presentation of a fibroid is with menorrhagia and they are small in size. They are managed either medically by progesterone tablets or with gonadotrophin releasing hormone analogues or surgically by myomectomy. In Ghana, fibroids are large and they are very common. Therefore clinicians have to frequently consider many other complications such as pressure effects, fibroid degeneration and their potential to obstruct labour. With these considerations, it is easy to appreciate why myomectomy procedures constitute a notable proportion of theatre case load at Korle Bu teaching hospital (KBTH).

My time in Ghana has exposed me to many interesting clinical cases but a key area that is important to highlight is the presentation of advanced disease, which is unfortunately far more prevalent in Ghana and is particularly pertinent within pelvic oncology. Cervical cancer is an important public health issue worldwide and

needlessly claims the lives of hundreds of thousands of women each year. In the U.K, mortality rates have significantly declined, largely due to the introduction of the cervical screening program which uses cytological based methods to screen all women from the age of 25 to 50 every three years and every five years between the ages of 50 and 65. Based on the cytological results, patients either continue general screening or are referred to colposcopy clinics for further investigation and or treatment. A national cervical screening program has not yet been established in Ghana and it is for this reason that patients first present to outpatient clinics with advanced stages of disease that are often not amenable to curative therapy.

Obstetric clinics and the time I have spent on labour wards at KBTH have profoundly changed my perspective on how obstetric care is managed and delivered. In the U.K we are very much dependent on equipment and investigations to determine patient management. However, in Ghana such resources are unfortunately not as easy to access, due to evident fiscal constraints and so clinical skill and acumen have to become ever more acute. An example of this is reflected by examining the diagnosis of foetal distress in labour. At KBTH this is determined by noting foetal bradycardia with a pinard stethoscope and/or identifying meconium stained liquor. In the U.K foetal distress would be determined by continuous cardiotocograph monitoring and the diagnosis determined based on the trace findings. Of course both methods are valuable, but perhaps the most key learning point I have derived from my time at KBTH has been the importance of clinical skills and indeed improving my own technique in clinical examination.

Regarding specific obstetric conditions in Ghana, pregnancy induced hypertension and its sequelae from pre-eclampsia to eclampsia are far more prevalent than in the British population. From my experiences in O & G at home, I had yet to observe one case of pre-eclampsia, yet in my first two weeks here I saw numerous patients with imminent severe eclampsia to eclamptic fits themselves. The reason for this is perhaps two fold; hypertension is more common in those of African descent and secondly, such is the nature of our health care system, British patients more frequently attend regular antenatal visits where blood pressure and proteinuria are carefully monitored and controlled.

Objective (2): How are Obstetric and Gynaecology services provided to the population in Ghana?

In order to understand how O & G services are provided in Ghana, it is important to understand the structure of health care in Ghana more laterally. Healthcare in Ghana is provided by the government and is delivered by the Ministry of Health. Ghana is divided into ten regions, each of which has its own regional hospital. Subsequently, in each region, there are numerous smaller district hospitals, polyclinics, health care

centres and health posts which can all provide primary care to a patient presenting with an O & G condition. If more specialist care is required, patients are then referred to a tertiary centre, of which there are four in Ghana and of which KBTH is the oldest and thus most established.

In addition, there are private health care institutions for those who can afford them and services provided by religious groups under the Christian health association of Ghana. It is also important to acknowledge that herbal and spiritual healing constitutes an important role in Ghanaian society and are well established within the community.

Objective (3): Regarding Obstetrics and Gynaecology at Korle Bu Teaching Hospital, how could care be improved?

With regards to healthcare, the need for greater financial input is evident as the morning meetings in the department clearly identify. Of course improved resources such as continuous CTG monitoring in labour wards for high risk patients would bring benefit, but they are undeniably expensive and clearly, the main limitation to healthcare in Ghana is cost.

Therefore I believe that if I am to suggest a reform, it has to be one which is attainable and can be achieved.

Infection control is one of the powerful tools we have in our armamentarium against disease. Therefore strict adherence to clearly outlined infection control guidelines would no doubt help to reduce preventable morbidity and mortality. The exact detail of such guidelines is beyond the scope of this review but it would include washing hands between patients, easily accessible alcohol sanitizer and ensuring that all wards are cleaned to the highest standard possible with deep scrubs of the wards performed regularly.

Objective (3): Undertake a case report summary and reflect how it enhanced my understanding of the speciality.

Summary of the case history and examination:

Madam G.A is a 21 year old gravida 1 para 0+0. Her gestational age is 37 weeks and 1 day. She was referred from the cardiothoracic centre at KBTH as she had undergone a mitral valve replacement procedure in 2009 and was on warfarin therapy 15mg nocte. The patient also presented with concurrent anaemia of pregnancy. Recent laboratory investigations indicated her haemoglobin as 8.4/dl on the 16.06.2013.

This index pregnancy was unexpected and was discovered at 6 months gestation. Thus far the pregnancy had progressed uneventfully and the patient reported no adverse symptoms on systemic enquiry.

Madam G.A reported no other significant past medical or surgical history.

Gynaecological history revealed a 28 day cycle with 5-6 days of bleeding in a calendar month. Menses were heavy the first three days with clots and dysmenorrhoea, which then subsided. She has never used contraception.

Madam G.A had been taking warfarin, 15mg nocte since her mitral valve replacement in 2009 and regularly attended cardiology clinics for monitoring. Prior to admission she had stopped her warfarin therapy on advice from her cardiologist and was due to start subcutaneous heparin. However there had been a delay before this was initiated, during which time her I.N.R had fallen to 1.2 (target range: 3.5). She was also on haematinics, folic acid and malaria prophylaxis.

The patient was unemployed and lived with her parents. Her partner of 3 years is the father. She does not smoke, drink or take recreational drugs.

On examination, the patient was well at rest and afebrile. There were no signs of anaemia or other peripheral stigmata of cardiovascular disease. Her blood pressure was 120/70 mmHg and her heart rate was 80 beats per minute. Heart sounds one and two were audible with a prosthetic systolic click most clearly audible at the apex. Cardiovascular examination was otherwise normal as was systemic examination.

The symphysio-fundal height was 35cm. Foetal presentation was cephalic with a 5/5 descent and the foetal heart rate was 140 beats per minute.

Management and reflection:

Maternal systemic conditions and pregnancy pose the clinician with many challenges as this case represents and it is a careful balance to assess timing and mode of delivery to achieve a healthy mother and child.

In terms of further management for Madam G.A, an echocardiogram was requested to assess cardiac function, integrity and possible thrombus formation. This revealed a prosthetic mitral valve with good function and no thrombus or pericardial effusion. The left atrium was dilated but all other chambers were of normal dimensions. Further to this the patient commenced fragmin 500 IU b.d and she received prophylactic antibiotics against infective endocarditis.

Ultrasound scans of the foetus revealed no abnormality and it was decided that an imminent caesarean section was the optimal mode of delivery due to the maternal risk of thrombus formation and/ or potential cardiac failure.

An elective caesarean section was performed on 24.05.13 under spinal anaesthesia and a live male of 2.4 kilograms was delivered. Apgar scores were initially 7 and 8. The baby was then transferred to NICU for monitoring due to neonatal sepsis and jaundice.

The management of cardiac conditions is difficult and requires a multi-disciplinary approach in terms of management. The obstetric department together with cardiologists, anaesthetists and radiology all constitute an important role regarding optimal care for such patients, as this case testifies. Madam G.A is fortunate that pregnancy had not overburdened her heart leading to dangerous sequaleae, but this case nonetheless identified important points in management such as investigations required, delivery options and complications to consider, that have enhanced my learning and that will an no doubt improve my understanding of future cases.