Clinical Leadership and Service in Women's Health: A Gynaecology Elective in Cairo

My LiA journey began on the 20th of June when I made the journey from London to Cairo having organised a medical elective, in Obstetrics and Gynaecology, involving training and shadowing at Ain Shams University Hospital. This was an opportunity for me to experience a public healthcare system in a developing country with significantly less resources than our NHS. As such, I would have the valuable chance to learn from uniquely skilled doctors and nurses who must manage a large patient population in an underequipped system. Being able to be part of the multidisciplinary team as well would place me in situations in which I must balance leadership with teamwork in the interest of benefitting the patients under our care.

I formally began my LiA on the 21st of June after having an introduction to the centre of Obstetrics and Gynaecology. After being assigned to my supervisor, I was taken to a short teaching session with other clinical medical students at Ain Shams University. This session focused on women in labour with comorbidities and how to deal with the problems that can arise. The students had been split up into small groups and tasked with taking histories from patients within the hospital. These histories were then shared with the wider group, respecting patient confidentiality, and my supervisor would highlight certain aspects of each history and test the group's approach to each case. I particularly enjoyed the high paced nature of the session with my supervisor grilling the students and myself about different patients and found the teaching method useful in learning. Following the teaching, my supervisor and I made our way to the theatres within the labour ward. I then had the pleasure of scrubbing up with my supervisor to assist with a Caesarean section for a patient. This was indicated as the preferred method of delivery due to the patient having a "classical" caesarean section in the past. The scar tissue this operation leaves has a weaker integrity than the tissue that was present before. This results in an increased risk of uterine rupture if the patient was to undergo a natural vaginal birth for another pregnancy.

Upon arriving to the theatres, I had the pleasure of learning how to scrub into a surgery and once the patient was anaesthetised the surgery began. I was working as my supervisor's second assistant which involved me holding retractors, allis forceps and even the cauteriser when his hands were busy. I also had the pleasure of holding the newborn as the umbilical cord was cut. Following the delivery, along with my supervisor, I went and congratulated the patient and reassured them of the successful delivery and healthy baby. This step was very important, especially after a caesarean where patients are typically awake despite being anaesthetised. Every bit of support from the medical team is of value. Furthermore, the patients at public hospitals can typically be a lot less educated than those that use the private sector in Egypt or even the general patient population in the UK. They very much put themselves at the mercy of healthcare professionals and so it's important that we always show our compassion explicitly and honour that trust that is put in us.

Another notable C-section I attended was an emergency case that I went out of my way to attend. After my supervisor had left for the day, I asked to remain on the labour ward to which the answer was "yes". Suddenly, I noticed shouting across the hallway for the theatre staff to rush and help prepare a patient for theatres. At first, I thought it was just another C-section however upon asking the scrub nurse, who was about to assist in the case, I found out it was a patient with a ruptured uterus. This is one of the most fatal obstetric emergencies and patients with this must be operated on and the baby removed before repairing the uterus. Following my conversation with the scrub nurse, I was pointed in the direction of another

junior doctor who advised me if I wanted to scrub in, I'd have to find the consultant who will be doing the case. After finding the consultant in another operating theatre, he granted me permission to scrub in and assist with the C-section. During the surgery, I noticed a much quicker pace and adjusted to the more frantic atmosphere. This change in approach was due to the increased complication risk. I held retractors, carried out suction and even had the consultant use my hand as an instrument in the surgery to help expose the uterus. The theatre was packed. Word had spread of such a case and there were other medical students observing as well as doctors and nurses wanting to see the stunning work the consultant was carrying out. At last, the baby was taken out safely, the bleeding was managed, and it was time for the uterus to be repaired. I had to hold open the skin while the consultant mended the ruptured uterus using the "baseball" stitch technique. Once the uterus was repaired and the layers above closed, the consultant left the suturing of the skin to the rest of us. I was moved to 1st assistant as the junior doctor took lead. However, before commencing the stitch, the junior doctor and scrub nurse suggested that I close the wound. Being a bit nervous, I asked the junior doctor to do the first couple of stitches so I could see how it was done. I made sure to keep the skin stretched and watched closely. They also explained to me where I should insert the needle and at what angle and depth. Very quickly my hands steadied due to the good support and confidence I felt from the scrub nurse and junior doctor. And after a longer than usual suturing process, due to my novelty, the wound was safely closed and what had begun as an emergency ended with the safe welcoming of a new life and delighted mother. This was overall a surreal learning experience for me to be able to lead a part of the surgery on the patient. Being given that responsibility and having it payoff is a moment I am very proud of and will always hold on to. My time on the labour ward was overall incredibly enjoyable. Aside from the C-sections, I attended many natural births as well as episiotomies. I also had the pleasure of learning to use an ultrasound scan. My time spent interacting with the patients had also been very pleasant and I made sure to make every effort to ensure the patients felt safe with me being a part of the team looking after them.

Outside of the labour ward, most of my time spent in the hospital had been in Gynae theatre. My first experience of this was on my second day where my supervisor didn't have any more patients to see in clinic and so took me to theatres where I accompanied one of his colleagues to an open abdominal myomectomy. A myomectomy is surgery to remove masses in the uterus called fibroids, while leaving the uterus in place. This was done for a patient who was experiencing heavy periods and severe pain. Upon meeting the patient, I was starstruck by the size of her abdomen. She had one very large fibroid that made her have the appearance of someone who was quite far along a pregnancy. After we explained the operation and gained consent, the patient was taken to theatres to be anaesthetised while myself, the consultant and another junior doctor scrubbed up. The scrub nurse had already scrubbed in and was preparing the various instruments that were to be used. The operation then began with a horizontal incision into the abdomen. As we made our way through the layers beneath to get to the uterus, the consultant was explaining to me that, this woman would in fact be better suited to have a hysterectomy (uterus removal). The reason being that she was an older woman and had already gone through menopause, therefore she couldn't have kids. However, despite having this explained to her, the patient wanted to keep her uterus. This was in full knowledge that leaving her uterus allows for the possibility of other fibroids growing in the future. In full respect of her autonomy a myomectomy was therefore the chosen management option. The reason it was carried out open was due to the sheer size of the fibroid (11cm in diameter). Once we reached the uterus, it looked extremely familiar to those of the pregnant women whose C-sections I had assisted with. However, this time it was not as easy as making an incision in the uterus and pulling a baby out. Instead, a much larger cut was made into the

uterus spanning pretty much the entire width of the surface. Because a fibroid is a uterine mass, it was physically attached to the uterus itself. All of us therefore had to use our fingers to bluntly dissect the mass from the uterus itself, until we could peel back the uterus over the entire fibroid and pull it out. This entire operation took 4 hours and was my first experience of such a case. I had the pleasure of, as mentioned, bluntly dissecting the mass from the uterus as well as holding the retractor to keep the skin open as well as assist in pulling back the uterus over the fibroid.
One of the last notable cases I was involved in, albeit limited, was a robotic surgery on a patient suffering from endometriosis. This was in the private wing of the university hospital, so I got to see both sides of the healthcare system. All the staff who worked in the private wing, also worked in the national service, however I noticed there was a much higher concentration of older, more experienced doctors and nurses than in the non-private departments. There was also a noticeable difference in how much more modern the equipment in the private wing was. This was my first time seeing a robotic case and I was very excited to even be able to help. Seeing as this is a very specialised skill, all I was tasked with was helping the biomedical engineers set up the operating theatre. The operation was carried out using 4 robotic arms, with 2 arms each side of the patient. I helped the engineers move the arms into place and helped spread the attachable instruments evenly next to each robotic arm. We then slid sterile casings around each arm and left the docking of the instruments to the operating team. At that point, the biomedical engineers' jobs were complete, however they remained in the theatre as a precaution if the machine stops working. I then had the pleasure of scrubbing in to help the operating team make the incisions through which the robotic arms would operate. I made sure to keep the skin stretched as the doctor made a small incision on the patient's abdomen. This was repeated 5 times as there is an extra incision made to insert the camera. Once completed, I removed my sterile theatre costume and washed my hands before being invited to accompany the consultant to the console in the corner that is used to control the robot. As the consultant didn't get hands on with the operation, he didn't have to scrub in. I was handed a pair of 3D glasses and was allowed to watch the operation unfold on the same screen as the consultant. The assisting doctors and scrub nurse were tasked with holding the camera in place, washing it and replacing tools on the arms when asked. As mentioned, this patient had endometriosis which is a result of lesions in the patient's abdomen. These are just bands of tissue that cause pain by mainly inducing an inflammatory response or growing very close to sensory nerves and pressing against them. These lesions were simply cut and removed. On top of this, the patient also had an ovarian cyst on the right and an endometrioma in the left ovary. The ovarian cyst was removed in what is known as an ovarian cystectomy. The endometrioma is a mass of endometrial tissue, which is part of the lining of the uterus, growing in the ovary. This mass then bleeds and becomes what is known as a "chocolate cyst" due to its dark appearance. The endometrioma in this patient had in fact developed into a chocolate cyst, but we noticed that it was leaking upon inserting the camera. Using the robot, the doctor drained the chocolate cyst and suctioned up the blood before skilfully using the cauteriser to cut the cyst from the ovary and remove it. This was an incredible experience to witness a robotic surgery and to see the inside of the body from a completely new perspective.

My LiA experience overall I believe was a success. I went into it hoping to have a balance of learning in my desired field, while also being an active part of the medical team, contributing to patient care and exercising leadership qualities while doing so. I got to get the most hands-on experience I've had in a medical setting and got to interact with patients with more of a focus on their treatment and care. I also played a more active role in the medical team than I

had ever done before providing me with many great learning opportunities skills wise as well as leadership wise.