Stage 1 – Visit to Muljibhai Patel Urological Hospital, Nadiad, India. November 2019 Stage 2 – Visit to Global Rainbow Hospital, Agra, India. December 2019 and January 2020

Stage 1: Muljibhai Patel Urological Hospital. Mentor - Dr. Sabnis

This 140-bed hospital, situated in Nadiad, Gujarat is dedicated entirely to Urology and Nephrology. It is well known for its ground-breaking work and was one of the founders is the world renowned, Dr. Mahesh Desai. I was lucky enough to be mentored by Dr. Sabnis, a man of equal experience.

Nadiad is situated an approximately 2-hour taxi journey from Ahmedabad airport. I was able to stay in an inexpensive hotel just across the road from the hospital. Philanthropic gestures from society and trustees of the hospital enable the upkeep of the hospital with regard to infra structure as well as offering pro bono services to those patients who cannot afford it. It is a centre of excellence for kidney transplantation surgery, robotic surgery and endourology/stone surgery.

A normal day started at 730 in the morning, in the luxurious postgraduate education centre with all junior doctors and consultants present. This consisted of an academic meeting provided by the junior doctors, including an educational presentation. In addition, case presentations of upcoming theatre cases and a 'board round' of the in patients was undertaken. Consultant input into the cases and teaching was provided, ensuring a wealth of experience was available for the care of each patient. This was followed by a ward round of all in patients. In India, it is the norm that families look after patients once discharged. It was refreshing to be on a ward round where there were no 'social' issues.

There are 6 operating theatres, with 2 dedicated to renal transplant surgery and the other 4 dedicated separately to robotic, laparoscopic surgery, core/minor urology and endourology/stone surgery. The theatres are well designed with excellent equipment. From a stone perspective, they had the latest technology available with single use flexible ureteroscopes, Clear Petra continuous suction PCNL and a Thulium laser. However, there was an admirable focus on keeping costs minimal, for example by making their own contrast dye and reusing expensive disposables. In my view, these 'savings' were pragmatic without noticeably compromising the standard of care delivered.

During my time there, there were approximately two to three prone PCNLs per day. These were done by either fluoroscopic or USS guided. As opposed to USS guided PCNLs in the UK, which is done by most radiologists 'free hand', in India most USS guided puncture was done with the aid of a guide, which clipped onto the USS hand piece. Fluoroscopic punctures were done by triangulation. Miniaturised PCNL was primarily performed.

One of the main differences in theatre, was the knowledge of the theatre staff. Auxiliary staff, ranging from scrub nurses, to theatre practitioners had a great knowledge of PCNL. They were interested and invested in the operations from start to finish. On many occasions, the theatre staff would give their opinions and advice on where to perform a puncture. It was great to see a real theatre team approach to ensuring a high-quality outcome for the patient.

Stage 2 – Visit to Global Rainbow Hospital, Agra, India. December 2019 and January 2020

I was drawn to Agra by the reputation of Professor Madhu Agrawal. He is a world renowned, highly experienced urologist, with an experience of over 14000 PCNLs. He is a pioneer of both tubeless PCNL and miniaturised PCNL. He has a calm demeanour and is an excellent teacher. He exudes experience and knowledge.

Agra is an approximately 4-hour drive from Delhi airport. I stayed in a clean guesthouse, which is a less than five-minute walk from the hospital. I had an air-conditioned room with an en suite. Meals were provided three times a day. If you were late finishing in theatre, then the meal would be kept hot for you in a Tiffin box.

The days began with a ward round at 9.30am. PCNLs would have an x ray KUB and bloods by the time of the ward round, and if clear, the urethral catheter and ureteric catheter were removed. The majority of patients would be discharged the day after a PCNL. There was a strong focus on data collection, with patient reported outcome measures meticulously collected. Professor Agrawal then conducted clinic, with the outpatient department being conducted in a wing of his house. The language barrier made attending clinic a futile exercise and therefore, I would be free between the finish of the ward round and the start of the theatre list at 4.30pm. This time could be used to review Professor's Agrawal's extensive PCNL lecture series and video library. Cases that were seen during the outpatients during the day were scheduled for that evening's theatre list. There was little advance scheduling of patients.

There were three theatres, in close proximity, enabling Professor Agrawal to oversee all of the cases. The theatres were incredibly efficient. The theatre staff were extremely knowledgeable. Professor Agrawal has had the same scrub nurse for over 15 years, and he would make sure that the patient was positioned and prepared correctly. Care was taken in planning the puncture for each case predominantly looking at the IVU.

I was given immediate hands on experience of PCNL. I was able to perform USS and fluoroscopic guided renal access. The majority of PCNLS were 15Fr mini PCNL using a 12 Fr nephroscope. Professor Agrawal provided invaluable tips, particularly with respect to renal access. He diligently tries to impart his thirty years of PCNL experience to his students. I was lucky to be involved in PCNLs for large upper ureteric stones and staghorn calculi. We also operated on morbidly obese patients and patients with spinal abnormalities. He diligently tries to achieve complete stone clearance in a single sitting, sometimes with multiple tracts.

It was a greatly valuable experience to learn from Professor Agrawal. His hands-on teaching, particularly with respect to renal access was invaluable. I hope it will stand me in good stead for my future NHS practice and to help my patients in the UK. I am extremely grateful to BAUS and WCE for this opportunity.