From Kandy to Kathmandu – A PCNL Travel Fellowship

Southeast Asia is renowned for its high-volume surgical practice in percutaneous nephrolithotomy (PCNL), making it an invaluable destination for training endourologists seeking to refine their skills. Supported by the British Association of Urologists (BAUS) Endourology/World Congress Endourology (WCE) Travelling Fellowship grant, I was privileged to gain hands-on experience in Sri Lanka and Nepal, immersing myself in two distinct healthcare systems and cultures while advancing my surgical expertise.

Upon arriving in Sri Lanka I headed straight to the lush hills of its Central Province and the city of Kandy, a designated UNESCO World Heritage Site. I had visited Sri Lanka earlier the same year with my young family, so the warm welcoming locals and delicious cuisine were no surprise. Knowing this, as soon as I had greeted the hotel staff, I eagerly indulged in a traditional Sri Lankan curry, and the first of many outstanding meals that embellished my trip.

The following morning, I stepped into the bustling environment of Kandy General Hospital. The second largest hospital in Sri Lanka with over 2,700 beds and a hub of endourological practice with two of the highest volume PCNL surgeons in the country- Dr Kanchana Edirisinghe and Dr Manjula Herath.

I entered the Urology Centre through its crowded waiting room, a reflection of the immense demand for care, and was welcomed by the rest of the team. The ward round of 40 inpatients was swift and several cases highlighted the familiar challenge of multi-drug resistant urosepsis. The consultant and registrar then each saw 30 new patients in clinic before attending theatre, while the small cohort of medical officers saw up to 150 follow-up patients in clinic. The relentless pace of work was no different in theatre, with at least 12 cases scheduled from the morning but numerous late additions and emergencies added throughout the day. The operating list was packed with the usual suspects, such as stenting, rigid ureteroscopy and transurethral resection of prostate/bladder. Additionally, there were 2-3 PCNLs per day, weekly nephrectomies and paediatric stone cases.

Resource constraints were a recurring theme; instruments were reused meticulously to minimise costs; a stark contrast to the growing single-use culture of the NHS. The staggering work ethic of the theatre staff was also matched with a flexibility that enabled emergency cases to be seamlessly accommodated without a huff of complacency, and ensured that operating time was never wasted.

Building on my prior experience of PCNL punctures, the senior consultants guided me through their PCNL technique. They utilised supine and prone positions, typically infra-12th fluoroscopic access with Alken dilators and a 30Fr Amplatz sheath, then stone retrieval with an old Swiss Lithoclast and a single precious stone grasper. Equipment was fragile and treasured thus always treated with care. There were no flexible scopes used for PCNL therefore saline pushes via needle access were regularly employed to mobilise stone fragments towards the retrieval tract.

The team's hospitality extended beyond the hospital, and I was honoured to attend a registrar's farewell dinner at a hilltop restaurant overlooking Kandy. The scenic beauty of Sri Lanka was further highlighted during a visit to Sigiriya, an ancient rock fortress steeped in history and surrounded by breathtaking landscapes.

After two weeks in Sri Lanka, I travelled to Kathmandu, the vibrant capital city of Nepal which is steeped in history, boasting several UNESCO World Heritage Sites and is the gateway to the Himalayas. I was warmly greeted by Dr Khadgi, a renowned endourologist specialising in mini-PCNL, before being shown around the private hospital he had meticulously designed. Striving for efficiency, he had built a left and right sided operating theatre equipped with duplicate instruments, including lithotripters and C-arms. An endourologist's dream!

Each day began with a ward round of approximately 15 patients, before two PCNLs in the morning. Following this, a midday clinic with 30 patients passing quickly through the doors, before the afternoon operations; usually urethrotomies, a diode laser enucleation of the prostate or another PCNL. Dr Khadgi's team operated with impressive precision and coordination. Roles were clearly predefined, allowing seamless transitions between cases. All renal stones were treated with mini-PCNL and performed under spinal anaesthesia in prone position. Spinal anaesthesia was preferred due to the low cost and ease of proning patients on a single table.

In contrast to government hospitals, there were no lengthy waiting lists meaning patients were often seen in clinic and operated on the same day. Patients frequently travelled from afar, carrying with them their CT films and an expectation of complete stone clearance. Bilateral PCNLs were commonplace and whilst the procedures were quick, complete stone clearance was an absolute priority.

Although smaller PCNL tracts confer a lower bleeding risk, I found in the UK that mini-PCNL was usually reserved for a narrow range of stone cases. Whereas for Dr Khadgi, there was seldom a staghorn too large or complex that he would not tackle it with miniaturised access. Over the course of two weeks, Dr Khadgi provided hands on training in his mini-PCNL technique, which was an eye opening experience to the full potential of this procedure. The set up was prone position, fluoroscopic access with two step dilatation, an 18-20Fr Amplatz sheath and a 12Fr nephroscope. A supra 12th, horizontal tract into the mid pole was his preference for manoeuvrability and drainage. Constant attention to irrigation flow and angle of the tract ensured optimal drainage whilst minimising intra-renal pressure. Dr Khadgi was patient and methodical in both his operating and teaching, so by the end of the two weeks I had gained a significant number of PCNL punctures and developed my speed and accuracy triangulating difficult calyces.

During my stay, I also explored Kathmandu's rich cultural heritage, visiting Durbar Square and embarking on a short hike to Nagarkot. Though my time was limited, the glimpses of the Himalayas left me eager to return for more extensive trekking.

Both Sri Lanka and Nepal demonstrated resilience, resourcefulness, and an unwavering commitment to patient care despite systemic challenges. Their ability to maximise efficiency within constraints offers valuable lessons for addressing similar issues in the NHS. I have returned with an enriched knowledge and experience in PCNL techniques, and I am deeply grateful to the teams in Kandy and Kathmandu for hosting me, as well as to the generous support of BAUS Endourology/WCE, which made this transformative fellowship possible.

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