## Fadi Issa Surgical trip to Lalgadh, Nepal 12th-21st January 2019

I joined the Working Hands Charity trip to Lalgadh Leprosy Hospital & Services Centre in Janatpur, Nepal, in January 2019. I have always been keen to understand more about surgical outreach projects in regions of low resources, but was hesitant to join such teams until I was advanced enough in my training to be able to contribute tangibly.

The team consisted of Mr Donald Sammut (DS), Mr Sam Gidwani (SG, Consultant Orthopaedic Hand Surgeon), Dr James Rogers (JR, Consultant Anaesthetist), Trudy Vaughan-Brooks (TVB, Theatre Sister), Jean Cahill (JC, Hand Therapist), Ann Garewal (AG, Hand Therapist), and Elena Hughes (EH, Neuroscience Student, JHU). The team was entirely funded from charitable donations, sponsorship, industry contributions, pro bono flights, and the BSSH contribution for my travel. Apart from DS, SG and JR, the remainder of the team had never visited Nepal on a medical outreach trip before. It was therefore a valuable learning experience for us all.

The team departed on the 12<sup>th</sup> of January with over 200kg of kit to be used solely in Nepal. All the kit was donated to the hospitals in Nepal with the principle that all consumables required for surgery are taken with us in order for us not to deplete local supplies. Our personal luggage was kept to an absolute minimum to allow the kit to be transported – my total luggage weighed 11kg. After a connecting flight in Abu Dhabi and a further internal flight from Kathmandu to Lalgadh, we arrived in the evening and began work immediately with a busy clinic. We were joined there by Dr Lok Chaurasia (LC), Hand Fellow from Kirtipur who came for a full three weeks of training, and Dr Krishna Lama (KL), main Doctor and Surgeon in Lalgadh.

In clinic, approximately 60 patients were waiting to be seen and each was thoroughly assessed by the multidisciplinary team. This clinic is widely advertised by the hospital (including by radio), with patients travelling from the immediate area as well as from India to attend. A further clinic was held the following morning for a handful of patients. A small number of patients would then arrive each day for assessment and were seen outside theatres and during the short breaks. Some of those who attended were former patients who needed further intervention or their contralateral hand addressed. These patients often attended with their laminated operation sheets — certainly the most effective way of ensuring medical notes are safe and available is to keep a copy with the patient.

This clinic was one of the most memorable learning experiences of my career, and one that I believe virtually every trainee should take part in. It was a masterclass in rapid hand function assessment and decision making, as well as clear communication and surgical planning. There was a wide variety of pathology which was mostly leprosy related, including intrinsic minus hands, thenar wasting, and joint instabilities. Additionally there were a large number of patients presenting with old, untreated injuries including malunited fractures, burns contractures and chronic infections, as well as longstanding congenital abnormalities such as adults with complete syndactyly.

The overall age of the patients was very young, with many children and teenagers attending who had been affected by leprosy and burns. The entire team was present at this clinic, including the two hand therapists who started to plan the postoperative rehabilitation and splinting that would be required. Operating lists for subsequent days were then devised, with leprosy patients always prioritised. It was critical that all these patients were treated, given the principal aims of the charity.

The remainder of the week consisted of full day operating, starting with an early breakfast and then 7-8 cases per day. There was a rapid turnover due to the efficiency in which the anaesthetic brachial blocks were performed and the well organised theatre team. Members of the team assisted or performed operations under DS' guidance. I personally performed a Zancolli lasso procedure for an intrinsic minus hand, an FDS opposition plasty, a thumb IPJ fusion, an excision of a vascular malformation at the wrist, and excision of a large skin tumour from the scalp. TVB helped streamline theatre protocols and tutored the local theatre nurses who became infinitely more effective towards the end of our stint in Lalgadh. Both JC and AG attended many of the procedures to learn more about the surgery and to discuss and plan postoperative therapy. They worked closely with the Lalgadh therapists and produced clear postoperative instructions for each patient as well as general guidelines. It was a privilege to learn about the procedures performed for leprosy patients in an environment with no other distractions and with a high throughput. In one single day there were 5 Zancolli lasso procedures, providing the opportunity to learn about the finer points of the procedure and consolidate my knowledge. Photographs and notes were taken for each stage to help provide visual guidance for when I may perform such procedures in the future, particularly given my plans of specialising in late burns reconstruction and spinal injuries and tetraplegia.

Tutoring was central to the programme. This included teaching both the local Nepali team members as well as the home team from the UK, and was a particularly valuable element of the trip. Apart from the one-to-one tutoring in theatre, tutorials also comprised powerpoint presentations given by DS covering a wide range of topics (including both anatomy and surgery), projected onto a brick wall. Both LC and KL were also tutored intensively by DS throughout the visit.

The educational value of the visit was not just in the aspects of patient care and surgery, but in understanding how such projects are initiated, funded, conducted and sustained. Ensuring that work continues outside the visits is crucial, but it is critical that the quality of this work is maintained at a high level and hence regular visits are integral to sustainability. It is certainly a model that I would like to emulate in the future. It is effective, efficient and it truly makes a difference to all involved: the patients, the local staff and the team. Every donation reached the frontline. We lived together with few outside distractions (e.g. no internet!) and all our focus was on the patients and the surgery.

On the final day, all patients were reviewed and provided with final instructions on rehabilitation. Each patient was given a laminated copy of the surgery record, including drawings and details of the procedure. I returned to the UK at the end of the first week,

although DS, TVB, JC and AG all stayed on for a further period of time in Green Pastures, Pokhra. TVB, JC and AG returned to the UK on 24<sup>th</sup> Jan whole DS went on to teach in Kirtipur Hospital, Kathmandu, ending his visit on 3<sup>rd</sup> February.

I am grateful to the BSSH for providing me the opportunity to join the Working Hands team and look forward to putting what I learned into practice.