BOA Travelling Fellowship Report 2020

Ady Abdelhaq, ST6 Trauma & Orthopaedics, East of England

Fellowship Details:
Children's Orthopaedics
Lady Ridgeway Teaching Hospital for Children
Colombo, Sri Lanka
October 2019 – March 2020

I would like to thank the BOA and Zimmer Biomet for their generous contributions which allowed me to undertake this unique and valuable fellowship.

Summary

I spent 5 months in a large children's hospital in Colombo, Sri Lanka, gaining experience in children's orthopaedics. In a resource limited hospital, I learned how to manage a lot of things non operatively, and how to deal with the significant occasional complications from such a strategy. We saw over 150 patients at each clinic, and operated on 5 cases in a half day list, with truly impressive work ethic and motivation evident among all staff. I logged 187 operations total, including 63 supracondylar elbow fractures, 9 SUFEs, and 12 operations for DDH, which is amazing exposure in a short space of time.

The fellowship was cut short by Covid-19, but it was still a valuable and enriching experience, which has significantly increased my confidence and will add value to the rest of my training. I would highly recommend something like this to anyone who wants to be a children's orthopaedic surgeon.

Background

I have been interested in children's orthopaedics since my early days as an orthopaedic registrar, before I got my training number. With that in mind I have done placements in children's orthopaedics at ST3, ST4, and ST5 level. At ST5 I was placed in the West Suffolk Hospital, which has a strong connection to the Sri Lankan Orthopaedic Association, and receives Sri Lankan orthopaedic trainees regularly for their overseas fellowship.

The idea was suggested to me by one of my trainers in WSH to undertake a fellowship in the other direction. He had personally visited Sri Lanka many times and knew the President of the SLOA, Mr Sunil Wijayasinghe, quite well. Mr Wijayasinghe happens to be the only sub specialised children's orthopaedic surgeon in Sri Lanka, a country of 23 million people. The opportunities for learning were immediately obvious to me, and I jumped at the chance to go.

Introduction

Sri Lanka is a small island nation just off the east coast of India. It has a long, proud and rich cultural history and has been colonised and influenced over the centuries by Dutch, Portuguese, and British traders. Its position along the spice trail, and the presence of a deep-water port, made it an ideal

place for historical trade and business. Sri Lanka also has abundant natural resources, and as such should not be considered a poor country. However, a long and bitter civil war that ended in 2009 stymied much of its growth and progress, and as a result it still lags behind its potential. At the height of the war, there were only 7 orthopaedic surgeons in the entire country, serving a population of 17 million people. However, things are improving rapidly, and since then they have introduced a formal training program for orthopaedic registrars, and now the number of consultants stands at 73, serving a population of almost 23 million. This is still far behind the UK, and the resources in public hospitals are, understandably, limited. As a result, the treatment decisions and algorithms are generally quite different to what we are accustomed to in the UK. This presented ample opportunity to learn new (old) techniques, and to learn how to take a step back and look at the bigger picture of delivering healthcare to populations as opposed to individuals. I spent 5 months in the department in total. Unfortunately, the planned final month of my fellowship had to be foregone due to the Covid-19 crisis that was rapidly accelerating towards the end of March 2020, and I had to leave the country in somewhat of a hurry. Nevertheless, I learned a huge amount during my time there.

Myself and Mr Wijayasinghe

<u>Hospital and Department</u>

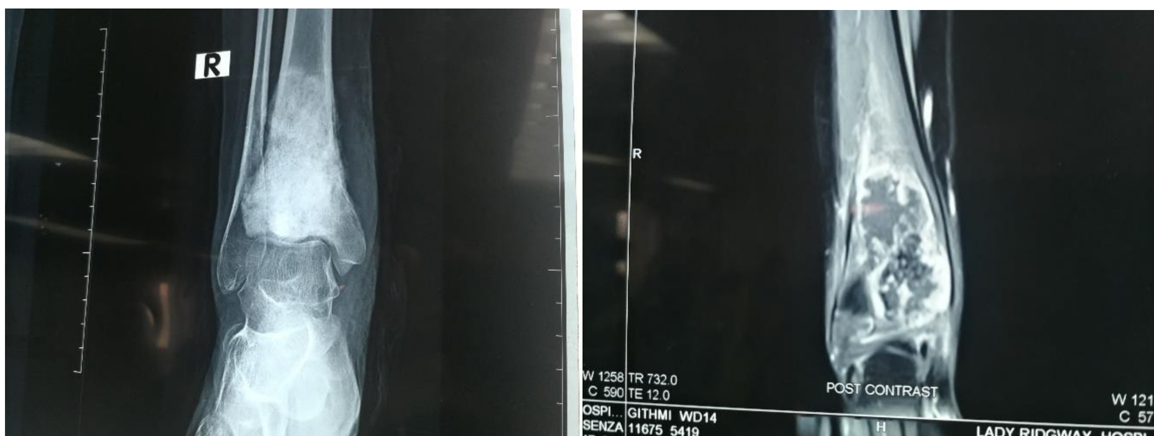
Lady Ridgeway Hospital for Children is a 1000+ bed government funded paediatric hospital in the middle of Colombo. It is one of the largest paediatric hospitals in the world, yet it only has 4 operating theatres. It also has 2 smaller rooms where minor procedures can be undertaken. As a result, availability of theatre time is the most valuable resource, and the limiting factor in many treatment decisions. It is blessed with a fantastic anaesthetic service, which manages to turn around theatres at a speed barely imaginable in the UK context.

Mr Wijayasinghe is the only orthopaedic surgeon in the hospital, and has a team of 6 permanent medical officers, and one rotating trainee registrar. The team is supported by specially trained nurses in the plaster area, the clinic, the wards, and in theatre. Our weekly schedule consisted of two general orthopaedic clinic days on Monday and Wednesday, a dedicated club foot clinic every Tuesday, and two half day operating lists on Thursday and Friday. There was also an opportunity for minor ops every morning, shared with the plastic surgery service.

Clinics

The clinics are extremely busy, and the number of patients coming in is unrestricted. Clinics were regularly over 150 patients, with the largest clinics I attended being in excess of 250 patients. The amount of pathology is incredible, and I saw cases regularly that I have only seen once or twice in 18 months of paediatric orthopaedics in the UK. Some of the cases that are uncommon or rare in the UK but seen quite regularly in these clinics (more than one patient per clinic) include arthrogryposis, Blount's disease, vitamin D deficiency related disease, and severe and neglected infections. Other, even rarer cases I saw included osteopetrosis, benign and malignant tumours, bilateral congenitally absent femur, tibial hemimelia, and congenital upper limb malformations, to name but a few. Expectedly, the volume of "routine" paediatric problems such as DDH, fibular hemimelia, club foot, and generalised trauma was significant, and made up the bulk of the work. Particularly interesting were the cases of post trauma or post infection sequelae, where we saw some of the complications of having to treat patients under less than ideal conditions. Some of these cases required very unique and complex interventions, which still had to be done with limited resources.

A typical day in the orthopaedic clinic waiting room



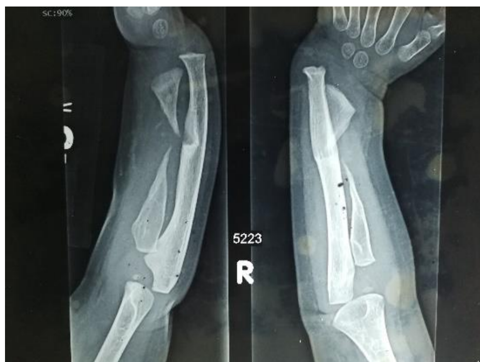
A lesion that turned out NOT to be an osteosarcoma…

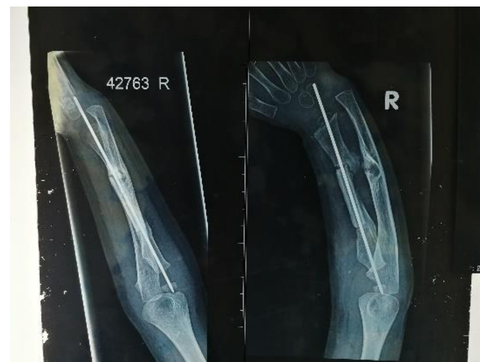
Operating & Logbook

The operating lists were mixed between trauma cases and elective cases, based on theatre time availability and clinical urgency. Generally, we would have at least 5 cases per half day list. I logged 187 operations in my five months, with the equivalent of only one full list per week.

The volume of routine trauma is staggering. The most common cases were supracondylar elbow fractures, of which I logged 63. The vast majority were reduced closed, with or without percutaneous pinning. Open reductions were reserved for cases that had presented late with a truly unacceptable position. Midshaft forearm fractures were also extremely common, and were generally manipulated by one of the medical officers on the minor ops lists during the week. This occasionally failed, and 35 of them made it onto the operating list during my time there. Other trauma numbers included 6 lateral condyle ORIFs and 9 SUFE fixations. There were also trauma cases that would be extremely rare in the UK paediatric population, such as 3 neck of femur fractures. Furthermore, Sri Lankan children sometimes sustain injuries due to mechanisms that do not exist in the UK, such as a severe forearm injury from putting their hand into a top loading washing machine while it is running.

On the elective side, there was a lot of DDH, with an average of one closed +/- open reduction per week. Again, the rarer cases on the elective side were full of learning opportunities. I saw 3 congenital vertical talus corrections, 3 congenital tibial pseudarthrosis reconstructions, and 16 corrective operations for malunion, non-union, late presenting monteggia lesions, or post infective sequelae.





Post osteomyeltic radial deficiency, reconstructed with fibular strut graft

Pelvic external fixation for exomphalos with anterior pelvic deficiency

Teaching and Learning

There were opportunities to learn in each clinic. With any interesting case came a discussion with the consultant, and he also delivered some formal teaching to me and the rotating registrars in this context. In theatre, most of the routine cases were done by the medical officers and myself, and I took these opportunities to learn some valuable skills, while also teaching the medical officers the theoretical side of orthopaedics, and some of the underlying principles behind the decisions we were making intraoperatively. The complex cases were done by Mr Wijayasinghe, who was keen to discuss the case intraoperatively and after the case, answering questions, discussing the latest evidence, and sharing key articles which inform his practice.

Conclusions

Overall, I had an incredible and enriching learning experience at Lady Ridgeway. Aside from the fascinating and informative rare cases, which I will never forget, the sheer volume of routine cases has increased my confidence with managing these significantly. As I continue my training and proceed to formal fellowship in children's orthopaedics, I feel much better prepared. The increase in skills and confidence I have gained can only now add value to the rest of my training, and I would highly recommend a similar fellowship to anyone who has a serious interest in children's orthopaedics.

(1570 words)