ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF GLASGOW

College and Ethicon Foundation Travelling Fellowships 2014

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StR8 Trauma and Orthopaedics, West of Scotland Rotation

Centres visited:

1) **Bone and soft tissue tumour unit, Tata Memorial Hospital, Mumbai**
2) **Department of hand and microsurgery, Ganga Hospital, Coimbatore**

Bone and soft tissue tumour unit, Tata Memorial Hospital, Mumbai

- Professor Ajay Puri and Dr Ashish Gulia

The Tata memorial hospital is the largest oncology unit in India, and is now recognised as one of the largest in the world. I have developed an interest in orthopaedic oncology during my training and was delighted to have the opportunity to visit this centre of excellence.

Main entrance to the out-patient department:

Last year the unit diagnosed 2400 bone tumours alone, representing a massive workload. Therefore both of the surgeons are entirely dedicated to tumour work, with no other general orthopaedic or trauma commitment. The unit is further supported by 2 fellows, 2 registrars and 2 residents.

During a routine week there are 6 or 7 all day theatre sessions with additional biopsy lists slotted in around the working day. On Tuesdays and Thursdays the team run all day clinics, during which they see over 200 patients whilst fitting in a multi-disciplinary team meeting half way through the day. Every case is discussed and reviewed by the consultant body. This served as a great means of communication between the team, and was an excellent opportunity for teaching.

With some of the juniors at the end of a long shift:

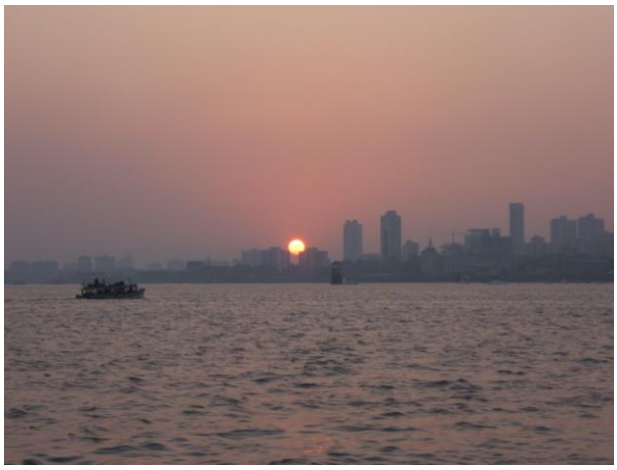
Patients attending the hospital are largely funded by the government, but there are some who are self or privately funded. This in turn may impact on the tier of room that is available during one's stay. It is often said that India is a country of extremes of wealth. This was no more apparent than in the operating theatres where basic amenities such as disposable drapes were not available, but multi-million pound robotic surgical technology was in regular use by other surgical departments.

From an orthopaedic perspective, one of the great steps forward by the local surgeons was the development of an affordable megaendoprostheses. This was developed by Professor Puri in conjunction with an Indian manufacturer, and seems to be functioning as well as any previously imported original at a fraction of the price.

The case mix at the unit was incredible. With a population of over 1.2 billion people, there is no shortage of potential patients. The department dealt with skin cancers, paediatrics and spine, as well as bone and soft tumours around the limbs. They did not however manage metastatic disease as they were already overwhelmed with their primary workload. This represented a significant change from local practice, where metastatic disease is a sizeable chunk of the work.

The trip to Mumbai was not all work. The fellows very kindly entertained me in the evenings and we even fitted in a boat trip to the Elephanta caves. The sun setting over Mumbai took me on to the second leg of the trip, in South India…..

Sun setting over a dusky Mumbai skyline:



Department of hand and microsurgery, Ganga Hospital, Coimbatore

- Dr Raja Sabapathy and Dr Hari Venkatramani

Hand and in particular microsurgery is typically the domain of the plastic surgeon in the UK. During my training I have thoroughly enjoyed hand surgery and wanted to develop this interest further, whilst also learning basic microsurgical techniques from my plastic surgery colleagues. Ganga hospital in Coimbatore provides a 450-bed private facility for orthopaedics, plastics, maxillofacial and neurosurgery. It has grown markedly since humble beginnings in 1978 as a 17 bedded facility. But why would anyone visit a hand surgery unit in a village on the western edge of Tamil Nadu? I had heard Dr Sabapathy give a talk 6 years ago at a combined hand society meeting, and thought that the unit deserved further exploration.

Ganga Hospital poking out behind some telephone cable:

So I had learnt that in Indian terms Coimbatore was a village, its population including the suburbs was only just over a 2 million. In Scottish terms, this was a large, bustling city with a heavy machine and farming industry. This meant lots of hand injuries all of the time. The team average 30 cases per day between the 6 plastic surgery theatres. There is no such thing as a waiting time, with all theatres ready to go 24 hours a day.

The typical day started with a ward round at 7:30 am. This was carried out by a traditional surgical firm, led by the consultant with all levels of junior in toe. This ensured continuity of care and minimised the need for handovers. We frequently saw up to 40 patients, and this was useful for case discussions over management, both with the local consultants and their numerous international visitors who were in daily attendance.

One of the first cases to greet me half way through the morning of the first day was a 48 year old lady who had got her hand caught in one of the machines whilst working on the farm.

Farm yard injury:

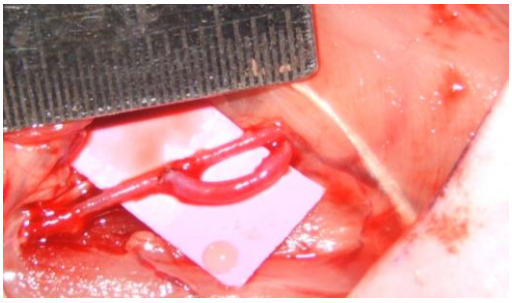
She was promptly transferred to the operating room and her case discussed. The options were replantation, amputation, amputation with planned subsequent toe transfer. The overwhelming consensus was that she should have her remaining hand replanted. However, the lady did not have the money for such an operation and the likely after-care required. She wanted to be back out on the field immediately, as a day away from her work was one without pay. At her insistence, she had an amputation and I have no doubt will have made a subsequent successful recovery.

This was my first major case in the private sector of India, and it raised several discussion points in my head: 1) did she get the correct treatment? 2) is the best treatment the same as the correct treatment 3) who should decide what is either the best or the correct treatment 4) how much does culture influence healthcare decisions? 5) should cost affect any of the decision making process?

The patient population was diverse. There were many local residents, but equally patients who had travelled several thousand miles on the basis of a recommendation from a friend or relative. I personally met people from the Middle East, all over Asia and even from the United States. All patients were accepted and treated, no matter how complex the case, something that has undoubtedly enhanced the international reputation of the unit.

Over the subsequent days I was fortunate to spend some time in the hospital microsurgical skills lab. This is a beautiful facility with high quality equipment and a super instructor in Mr Ravi. It is an excellent introduction to microsurgical skills and ideal for the beginner or for those with experience who simply want to get better.

Femoral vein to artery anastomosis in a rat:



The overall facilities in the hospital were comparable to anywhere in the world. The efficiency and ease with which they dealt with complex patterns of injury were far superior to most. Once again, like Mumbai, the case mix was phenomenal, and led to unrivalled surgical exposure.

I believe I have benefitted greatly from my time at both of these prestigious but very different centres of excellence. The Tata Memorial was government run, while Ganga a large private centre. Both places, however, carried out incredibly large volumes of work with humility, clinical excellence and surgical skill that was inspiring. At the same time the units also strove for high levels of training and education to junior doctors while maintaining very active research bases. I feel I have gained a wealth of experience which I will be able to incorporate into my future practice and I have made contact with many clinicians who are willing to give advice regarding difficult management problems in patients I may be involved in the care of in future. I can thoroughly recommend a visit to both the Tata Memorial and Ganga Hospitals to any surgeon and would suggest not being deterred by any preconceptions of healthcare in the Asian sub-continent.

I would like to sincerely thank the Royal College of Physicians and Surgeons of Glasgow for funding this exceptional educational experience.