



BRITISH SOCIETY FOR THE SURGERY OF THE HAND TRAVELLING FELLOWSHIP

Loyola University Medical Centre, Chicago and Mayo Clinic, Rochester,
Minnesota



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SPECIALITY REGISTRAR TRAUMA & ORTHOPAEDICS

Summer 2013

The Fellowship

At the outset, I would like to thank the British Society for Surgery of the Hand for giving me this excellent opportunity and undertake this travelling fellowship in the summer of 2013. I visited Loyola University Medical Centre, Chicago and Mayo Clinic, Rochester, Minnesota, USA from 5-22 April, 2013.

This fellowship was awarded to me after an application for travel and education bursary which was assessed by the British Society for the surgery of the hand. I had met Prof Randy R Bindra at the British Orthopaedic Association conference, 2012 held in Manchester and was intrigued by his work on wrist reconstruction and distal radius fractures. He agreed to host my visit to Loyola University Hospital in Chicago as part of this fellowship. I chose to visit Mayo clinic in Rochester to get exposure to the latest advancements in wrist reconstruction for osteoarthritis. Dr Peter Amadio agreed to host the visit to Mayo clinic at my request.

Preparation

Both institutes have special procedures to accept overseas visitors and that process has to be started about three months before the visit. I had to submit an application form and my curriculum vitae for the observership. Both institutes required latest occupational health assessment and Hepatitis B immunization certification in addition to other disclaimers before agreeing to allow the visit to proceed. Application to observe form has to be completed and signed by applicant, sponsoring faculty member and department Chair. I was required to submit the proof of current individual health insurance, external letters of recommendation from program director of current program and sign conditions for clinical observers form, acceptance of risk and confidentiality obligations form.

Travel to United states of America also required the ESTA application for the visitors visa. I found the american airlines advanced booking system very suitable for booking the multiple flights from UK to USA and internal flights within the USA. I also visited Los Angeles for a "From finger tip to shoulder" course during the weekend (12-14 April 2013) between the visit to Chicago and Rochester. This course gave me the opportunity to listen to Prof Giessler, Prof R Bindra, Prof Shawn O'Driscoll, Dr David Ruch, Dr Benjamin Sutker and Dr John Itamara debate about treatment of fractures and arthritis from hand to shoulder pathologies. This also included a saw-bone workshop and lectures.

Chicago

I spent the first week at the hand surgery department at Loyola University Medical Center in Chicago. It has three faculty members from the Department of Orthopaedic Surgery Dr Terry Light, Dr Michael Bednar and Dr Randy Bindra, and two from the Department of Plastic Surgery Dr Juna Angelats, and Dr Darl Vandevender. The services provided range from management of congenital abnormalities and hand paralysis resulting from spinal cord injury. It is a level I trauma center and there is an established fellowship program with exposure to management of complex upper limb trauma and replantation surgery in addition to reconstructive surgery, joint replacement, peripheral nerve repair and pediatric hand surgery.

Professor Randy R Bindra did his initial training in Bombay, Liverpool and a Hand fellowship in Pulvertaft Hand Center, in Derby and Washington University School of Medicine. He is now a faculty at Loyola Institute and its satellite units in Homer Glen, Hickory hills and Burr ridge. He has special interest in hand and wrist pathology, distal radius fractures and paediatric hand problems. He is the fellowship program director for the institute. Professor Bednar also has interest in spinal cord injury and wrist pathology in addition to other wrist, hand and pediatric hand problems. Professor Terry Light is Dr. William M. Scholl Professor and Chairman of the institute in addition to being a director of Clinical Leadership Administration, division of hand and orthopaedic surgery. He has special interest in paediatric hand problems in addition to other hand and wrist pathology and carpal tunnel syndrome.



Figure: Cloud Gate aka “The Bean” in the Millennium park in Chicago

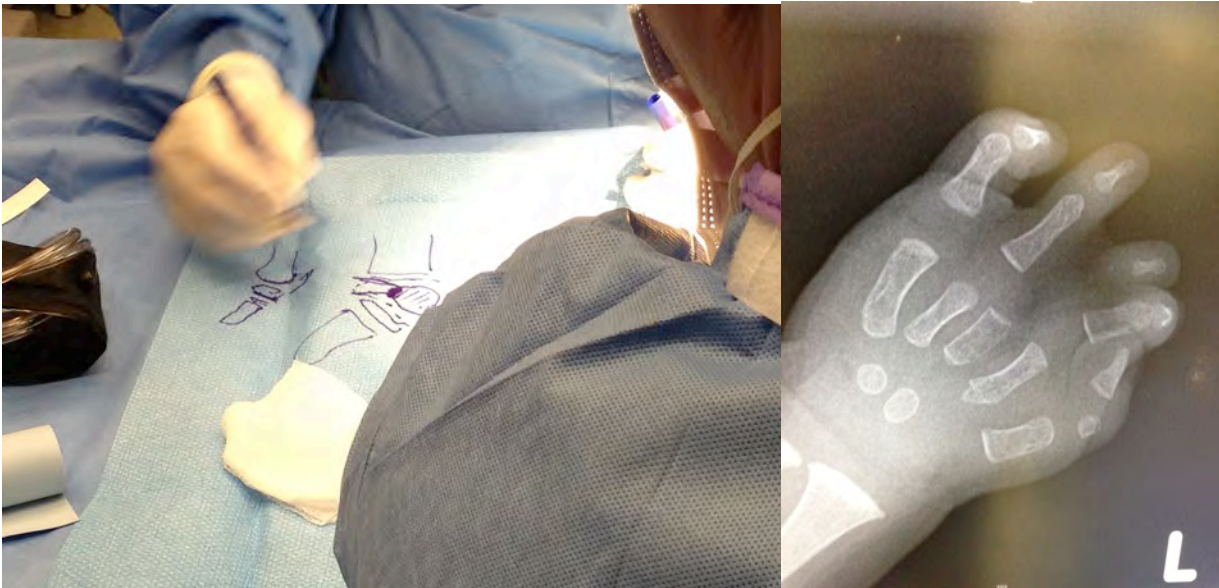


Figure: Dr Light describing the correction of deformity in a patient with clinodactyly (left) and radiograph of a child's hand with failure of formation (right).

I spent an intense first week with the team at Loyola Institute attending the outpatients clinics, theaters and the postgraduate teaching sessions at the main institute and their satellite centers. I had exposure to specialised pediatric hand surgery, elective hand surgery and complex intra-articular distal radius fixation to routine hand clinics.



Figure: In operating theatre with Dr Terry Light and Dr Nikki Nemeth (Hand Fellow)

It was a opportunity to be involved in discussion about cases of complex hand trauma and I picked up lots of tips along the way. The surgeons were very approachable and keen to discuss different treatment options. I also spent time in the outpatient clinics where, despite being busy, the team managed to find time to discuss principles in management of complex hand trauma and elective cases.



Picture in theatre at Loyola institute with Prof Randy Bindra, I and Dr Jason Levine (Plastic surgery fellow)



A case of urate deposits in finger tips, Prof Bindra demonstrating a arthroscopic stabilization of scapholunate dissociation and the picture of the screen during arthroscopy while reduction of the scapholunate interval was achieved.

Mayo clinic, Rochester, Minnesota

Rochester is the third largest city in Minnesota located on banks of Zumbro river with city population of 108,992. It has a combination of skyways and subways linking most of the downtown buildings and serves well to protect from generally cold surroundings. It is served by Rochester international airport. The whole city seems to be built around the Mayo clinic and the clinic remains the biggest employer in Rochester with 30,00 employees and drawing in annually a million visitors to the hospital.

Mayo Clinic is a not for profit medical organisation set up by Mayo brothers in 1889 and has since grown into the largest integrated medical center in the world including Saint Marys Hospital and the Rochester Methodist Hospital within it and covers all medical and surgical specialities. It is ranked among the best hospitals for orthopedics in the USA with the main focus on research and education. Its name is associated with some of the most read publica-

tions in orthopaedics and hand surgery literature.

Dr Peter Amadio is a professor of Biomedical engineering and Lloyd A. and Barbara A. Amundson Professor of Orthopedics at the Mayo institute. His present interests are tendon repair and reconstruction in the hand, compression neuropathy in the hand, pediatric and congenital hand disorders, tumors and hand problems in musicians. Large amount of his time is now taken over by the administrative, research and education activities at the institute with a rich portfolio of research activities in the Hand surgery department. He still manages to devote more than fifty per cent of his working time towards patient care.



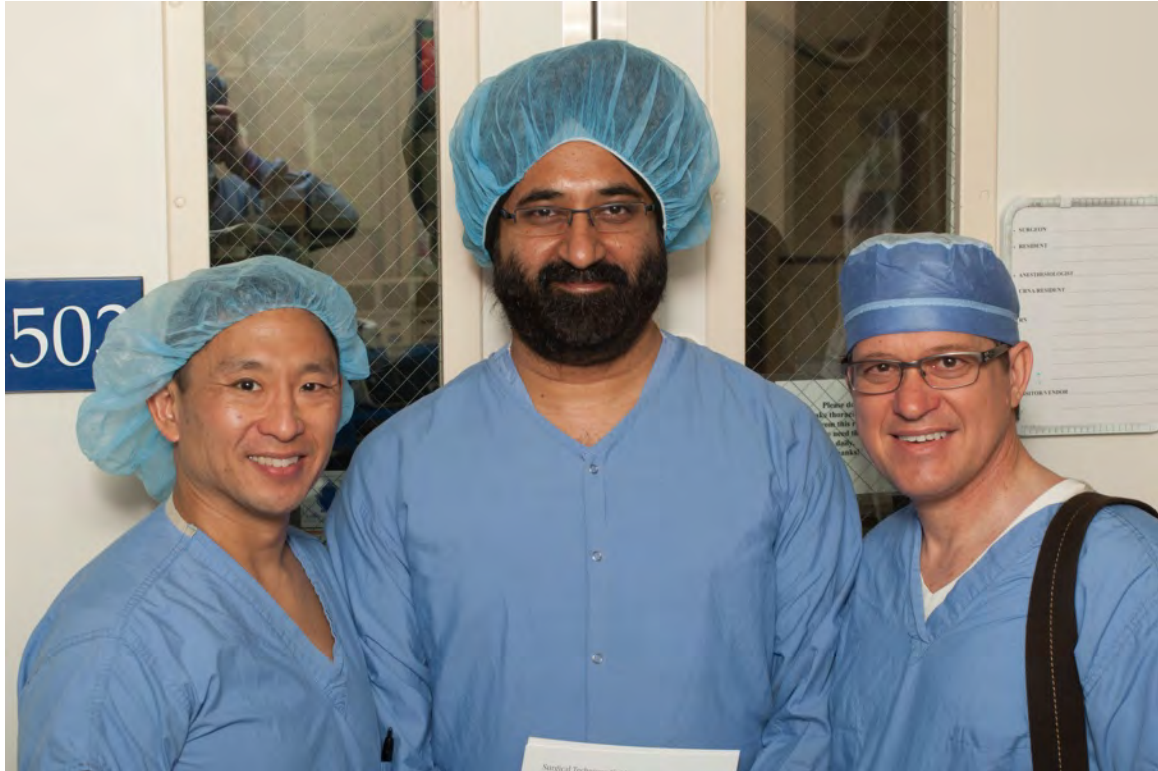
The second week I spent at the Mayo institute meeting different upper limb surgeons and attending outpatient and theatre sessions with them. I attended surgery with Professor Amadio and reviewed a series of cases ranging from routine carpal tunnel release, trigger finger release to complex reconstructions of wrist. I also saw an excellent demonstration of an anatomical trapezium replacement in a case with osteoarthritis of carpo-metacarpal joint of the thumb.



Picture: With Prof Peter Amadio who made my visit very informative and comfortable.

I also had an opportunity to attend theatre sessions with Prof Shawn O'Driscoll when I was fortunate to see a skillful arthroscopic debridement of the elbow joint for osteoarthritis. I also observed a case of complex reconstruction of intra-articular distal humerus fracture with parallel plating technique demonstrated by Prof O'Driscoll.

I also spent some time with Dr Sanchez, and his team in trauma theatre to see complex shoulder reconstruction and joint replacement surgery. The strongest feature of the hospital has been the proper blend of clinical and academic activities and the steady and planned increase of team members so that the services provided are world class and up to date. I also was given the opportunity to present my research on proximal row carpectomy and four corner fusion surgery and importance of Dart thrower's motion in the post graduate meeting at the institute.



Dr Peter Amadio introduced me to Dr Alex Shin (left in picture) and Dr Allen Bishop (Right) and I attended theatre with them observing complex brachial plexus reconstruction and microvascular surgery. I was fortunate to observe a case of a fragment specific fixation of complex intra-articular distal radius fractures by Dr Shin who has introduced this method of fixation.

I found the whole work culture and ethos in Mayo hospital very inspiring. I was reminded about the high principles of Mayo brothers about patient care and team work. He mentioned a saying – “if you want to walk fast, walk alone. However if you want to walk far, then walk together”. technique. The founders keenly support research and the foundation has now grown in strength and supports the academic training of the hospital staff, holding scientific meetings and conferences and funding on-going research activities of the department.

Finally

Overall this was a fantastic opportunity and one that I would highly recommend to others. During this fellowship, I saw complex cases, both elective and trauma. I would like to thank British hand society for running such a worthwhile fellowship.



Figures.

Front cover:

Nathan Landow atrium at the intersection of Mayo and Gonda buildings with “The man and freedom” statue depicting man’s concept and love of freedom through the portrayal of a young man straining to reach the sky.

Back Cover:

Reflection of the Chicago skyline in the Cloud Gate aka “The Bean” in the Millennium park, Chicago