

Medical School Elective Report
GSR Institute of Cleft and Craniofacial Surgery, Hyderabad, India

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I spent 3 fabulous weeks in Hyderabad, India with the Cleft and Craniofacial Surgery team at GSR Institute of Facial Plastic Surgery as part of my final year medical school elective.



My decision to spend part of my elective at a cleft and craniofacial unit was inspired by my self-organised placement at Great Ormond Street Hospital (GOSH) observing the Plastic Surgery Team operating on Craniofacial cases and the Oral and Maxillofacial Surgeons operating on cleft lip and palate cases. Having had a fantastic experience at GOSH, I was intrigued to learn more about these specialties and see a broader range and volume of surgery. The GSR Cleft and Craniofacial Unit in Hyderabad was highly recommended by peers through the British Oral and Maxillofacial Surgery (BAOMS) Junior Trainee Group who have previously visited the Hospital.

The Hospital

GSR Hospital provides care for patients with cleft and craniofacial deformities from primarily low socio-economic backgrounds. The majority of the operations are fully funded by the Smile Train Charity, a small number of patient's either contribute a small amount or all of the fee for the surgery.

The hospital was set up in 2004 by Professor Gosla Reddy, it was a privilege to be able to spend time discussing the set-up of the hospital with him. He explained the three pillars of GSR, firstly the Hospital treating over 1600 cases of cleft and craniofacial deformity per year, secondly the training of maxillofacial surgeons in cleft and craniofacial surgery and thirdly the education and support of children from low socio-economic backgrounds via the cleft school.

During my time observing the team at the GSR Hospital I witnessed a great variety and number of cleft related operations. The schedule of operations tends to follow an approximately set timeline with lip repair at 6 months, palate repair at 1 year, secondary alveolar bone grafting at 7-8 years, Orthodontics from 11 years and Rhinoplasty at 16 years with speech and language therapy throughout. Of course this timeline can vary greatly between patients depending on their presentation, needs and wishes. Some patients do not present until they are much older and hence their timeframe of operations is different to the aforementioned.

Originally, when the cleft hospital was less well known, the majority of patients were recruited from screening camps which took place in rural areas of the state of Andhra Pradesh (within a 1000km

radius of the hospital). Nowadays, the hospital is widely known and word of mouth is the primary referral method. The screening continues however this has developed from scheduled screening camps to a designated colleague continuously making house-to-house visits in the catchment areas screening for children with cleft or craniofacial deformities.

The surgical team is made up of the consultants, the fellows in training, and the residents (the post-graduate students). The two theatres have one Anaesthetist (who has been with the hospital since the very beginning) and a very able Anaesthetic Assistant who is proficient in cannulation and intubation, there are also a number of theatre nurses and assistants.

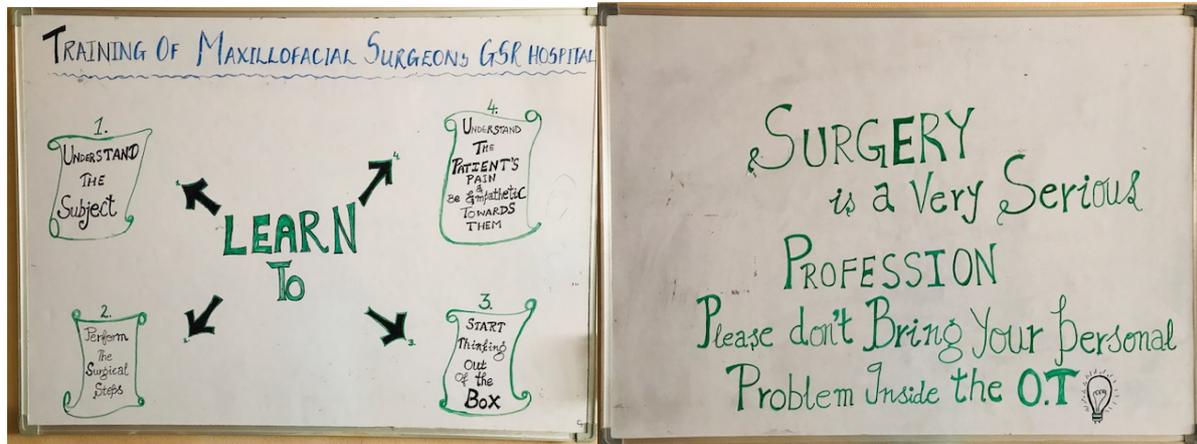
There are 2 operating theatres both running full lists Monday to Saturday and occasionally on Sunday too with one designated cleaning day per week. The efficiency of the theatre is phenomenal, no sooner is one patient out than the next has been brought in, lunch is taken between cases rather than a scheduled lunch break and everybody knows their role perfectly. The system runs like clockwork and this allows the hospital to get through a large volume of operations often 12-14 cases per day.

Following their surgery the child is kept in the ICU for 24 hours with post-operative checks by the surgical team. Sutures and packs are usually removed at 5 days and then the child is discharged home with take home medications.

From spending time in the Out-Patient clinic it was evident how much the patient's valued this service. Every patient and family member turned out in their best clothing often heavily embellished with beautiful jewellery, the ground floor out-patient department was always buzzing with children running around and playing from early morning to the evening. Patients are assessed in the clinic by the fellows and worked up for surgery as appropriate. There are two dedicated speech and language therapists based at the hospital working in the out-patient department as well as a visiting Orthodontist. Orthodontic treatment is not included in the Smile Train package of care and hence this is up taken less frequently than the subsidised surgical procedures.

I was fortunate to observe a great number of operations while I was at the hospital, these included primary lip repairs, lip revisions, primary palate repairs, fistula closures (both directly or with buccal myomucosal or dorsal tongue flaps), secondary alveolar bone grafting, rhinoplasty (with or without

harvesting conchal cartilage) and ear reconstructive surgery. Each surgery is uniformly performed according to the very thorough GSR Operative Manual which talks the reader through each step of the surgery, the rationale behind the techniques used and the armamentarium required for each procedure.



Comparisons with the UK

The GSR Institute runs without an appointment or scheduling system for the out-patient clinics or surgeries, this was a world apart from the system in the UK where patients are assigned an appointment or surgery date at a certain time on a certain day, often with long waiting lists of weeks or months. At GSR the daily outpatient clinic sees anybody who walks through the door. The families know approximately the age at which the child should present for each surgery and will attend at that time. If the child is fit for surgery and the pre-operative checks including bloods (baseline physiology bloods, HIV and hepatitis screen), radiographs, paediatric and anaesthetic checks are clear then the patient will go on to have surgery usually within the next couple of days, occasionally even on the same day!



The volume of cleft surgeries being performed was far higher than I have observed in my limited experience of cleft surgery in the UK. On discussing this with the surgical fellows the reasons for this stemmed from higher levels of consanguinity in the population, limited or lack of pre-natal deformity screening and a generally vast population.

The surgeries are all done without the aid of a microscope or loupes which are commonly used in the UK.

Comparably there is very little waste generated from the hospital, there were no gloves apart from surgical gloves used for operating, no paper hand-towels all the surgical drapes, and gowns are re-usable.

The Surgeons are all dentally qualified with the exception of Professor Reddy who has dual qualification in Dentistry and Medicine. The training for Oral and Maxillofacial Surgery is much shorter in India than the UK with 5 years of dental school, 3 years post-graduate training in OMFS and 1-2 years of fellowship in your chosen sub-specialty.

Perhaps my favourite difference from the hospitals I am familiar with in the UK was the need for a sign discouraging bringing coconuts into the hospital, this made me smile everyday on my way in! Also, interestingly each item in the operating theatre had a black bracelet with colourful beads on it, on enquiring what this was for I was told it was to ward off the evil eye in the Operating Theatre.



The Accommodation and Organising

I organised the trip by contacting Professor Reddy directly by the email address on the website, he was very welcoming and encouraging of my trip.

On arrival in Hyderabad, Professor Reddy had arranged transport from the airport to the Cleft School where he had kindly arranged accommodation in the guest apartment. The Indian school summer holidays fell during my stay and so unfortunately I didn't have the chance to meet the majority of the students who follow a fulfilling daily schedule of yoga, schooling, self-study and down-time. The college students we met were enrolled on courses such as Business and Politics, they had examinations during our stay and their dedication to their studies was evident (although they did enjoy a revision break for a chat and play with Snapchat filters!)

The Accommodation was conveniently located approximately 1 kilometre auto-rickshaw ride from the Hospital in a quiet area of the Sai Ram Nagar Colony. The apartment consisted of two bedrooms each with their own bathroom, a large communal area and a kitchen.

Hyderabad

Hyderabad, the city of diamonds and pearls, is the capital city of the South Indian State of Telangana and has one of the fastest growing populations of all Indian cities with an estimated population of over 9 million. The population is predominantly Hindu, closely followed by Muslims with a small proportion of Christians, Jains, Sikhs, Buddhists and other religions.

The team at the hospital were keen to recommend must see sights in Hyderabad which allowed us to experience Indian culture and learn about the City's heritage. We visited the Golconda Fort, Banjara

Hills, Salar Jung Museum, Fuluknuma Palace, Charminar and of course the best places to sample Hyderabad's signature dish - Biryani!

Summary and Acknowledgements

I had an exceptional experience at the GSR Institute of Facial Plastic Surgery, this opportunity allowed me to experience a huge range and volume of surgeries that would have taken me years to obtain otherwise. I have learned a huge amount about cleft surgery and I envisage that what I have experienced during my time in India will be invaluable in my future career in Oral and Maxillofacial Surgery.

I am extremely grateful to the entire team at the GSR Institute who made me feel extremely welcome and part of the team from the outset. They were always open to answering any questions I had about the surgeries, the workings of the hospital and India in general.

I am phenomenally grateful to the British Association of Oral and Maxillofacial Surgeons (BAOMS) for the mini travel grant assistance which helped to make this trip possible financially. Your assistance with funding my elective has helped to cover the costs of my VISA, flights and transport within Hyderabad.