

## Elective report

The multi-disciplinary management of cleft lip and palate at the GSR Institute for Cranio-Maxillofacial Surgery, Hyderabad, India

### *Introduction*

The GSR institute is a charitable organisation established by Professor Srinivas Gosla Reddy in 2000. The hospital is situated in the southern suburb of Saidabad, within the city of Hyderabad, the capital of the central Indian state of Andhra Pradesh. It has grown to a modern 50 bed hospital with 2 operating theatres, where a broad spectrum of craniofacial surgery is performed. The unit specialises in the management of facial cleft deformities and is supported both financially and through research by a number of renowned establishments across the globe. As such, treatment for patients from lower socio-economic backgrounds can be provided free of charge or at a highly subsidised rate. There is also a 'cleft school', providing free housing, food and education for approximately 30 students from the poorest backgrounds.

As a junior trainee in Oral & Maxillofacial surgery (OMFS), I had thus far little exposure to the management of cleft deformities. This unit was highly recommended by friends and colleagues within the specialty, hence the elective period provided the perfect opportunity to further my clinical experience within this subspecialty and explore a part of the country that I had not previously visited.

### *Objective 1*

*To describe the pattern and multi-disciplinary management of cleft deformities within the local population. To compare the local epidemiology with that in the UK.*

Before going to India, I was of the opinion that cleft deformities were more prevalent on the subcontinent compared with the west. According to the team at GSR, the epidemiology is the same across the globe, however India with its significantly higher population, has a greater number of cases. Furthermore a lack of awareness of the condition among certain populations combined with a relative scarcity of surgical services, results in a greater number of untreated cases.

In the UK, cleft of the lip and palate is the most common congenital facial deformity with an incidence of 1:600 to 1:700 live births. Such defects are more common among mongoloid groups. Isolated clefts of either the lip or palate are less common, occurring in 1:1000 and 1:2500 live births respectively. Cleft lip is more common in males (2:1), most frequently occurring on the left side. In contrast, isolated cleft palate is more common in females. A discussion of the multi factorial aetiology and pathogenesis is beyond the scope of this report.

Facial clefts can be diagnosed intra uterine life. Post natal management involves a multidisciplinary team comprising of Paediatricians, Speech & Language Therapists (SALT), Cranio-maxillofacial & Plastic surgeons, Dentists and Orthodontists. At GSR, primary closure of the soft palate is performed at 10 months of age, so that the development of speech is not impaired. They employ the Furlow technique which is essentially a random pattern, myo-mucosal flap based on levator veli palatini. This is something that I had never seen before, as almost all primary closure in the UK is performed by Plastic surgeons. The hard palate is closed as a second procedure at approximately 20 months, by which time the size of the defect is smaller due to the effect of palatal growth, resulting in less complex surgery. Bone grafting is performed around 7-8 years of age followed by orthognathic surgery post pubertaly.

In centres within the UK, cases are discussed and planned jointly within multi disciplinary team meetings and clinics. Although allied health professionals were involved in the holistic management of patients at GSR, their care appeared to be fragmented. Patients were seen by each of the individual health professionals at separate appointments, with little liaison between the involved parties. Furthermore very little information was documented within the medical notes. In particular, I was surprised that surgeons did not write an operation note based on the premise that they performed a finite number of procedures, each with a standardised approach.

## *Objective 2*

*To explore the organisation and delivery of OMFS services & training in India.*

On the subcontinent, OMFS remains a singly qualified specialty, such that trainees do not require a primary medical qualification. Following completion of dental school and pre-registration training, clinicians undertake a 3 year postgraduate course in Oral & Maxillofacial sciences. This fee based programme delivered by dental schools, comprises of theoretical and practical components, with responsibilities comparable to those of an SHO in the UK.

After this, clinicians are eligible to practice independently and apply for consultant posts, however some elect to undertake one or more fellowships, each lasting one year, within a sub-specialised branch of OMFS. During this time, there is greater emphasis on the development of surgical skills, with most time being spent in the operating theatre. As such, this intense year is akin to SpR training in the UK.

Both the Postgraduates and Fellows at GSR were required to work long hours for 6 days of the week, often arriving at 7am and not leaving until after 10pm, with only a short break in between. In addition the Postgraduates had nightly on-call duties. The clinicians are provided very basic but highly subsidised accommodation close to the hospital and the Fellows are paid a small monthly stipend.

All trainees were expected to be in theatre during the day, even if only three or four assistants were required. The remainder were expected to observe silently from a distance, which in my opinion was not conducive to their development. It was often very difficult to visualise palatal surgery even when you are scrubbed as the first assistant, let alone while peering over somebody's shoulder. There would always be one Postgraduate present on the ward, despite adequate nursing cover. This manpower could be more efficiently utilised to complete other duties such as pre-surgical work up of patients, which at present is left

until after theatre. This would also provide the opportunity for trainees to do some reading and engage in audit and research projects.

Overall the atmosphere at GSR appeared to be extremely hierarchical. Juniors would stand up and stop talking mid sentence when the consultant entered the room. They seemed to be fearful of the boss, such that questions were not asked and subsequently mistakes were repeated. Unfortunately there were many incidences of public humiliation and the shouting in theatre often made the situation unbearably tense. Many of the trainees have grown to accept this behaviour and feel that it is endemic in parts of India. They will not complain for fear of further retribution. Of course I myself have witnessed bullying within surgical teams in the UK, but certainly not to the extent seen at GSR. In my opinion many of the problems arose as trainees were expected to 'watch and learn', before subsequently performing a procedure without the Consultant being present. From my own experiences, this is extremely difficult and trainees should always be supervised closely when they are relatively inexperienced.

In contrast to GSR, the UK institutions have established protocols and procedures to protect patients and staff, with several tiers of accountability and organisation beyond the consultant. On the plus side, this lack of bureaucracy results in high surgical output, with excellent hands-on opportunities for trainees.

### *Objective 3*

*To gain insight into grass roots hospital care in India. To contribute to a programme of health promotion with the local population.*

Unfortunately my voluntary services placement with an NGO in the city was cancelled at short notice for logistical reasons, therefore my rather skewed opinion of healthcare in India, is based entirely upon my experiences at GSR.

Given the excellent facilities at GSR, I was stunned by the lack of consideration for infection control in some situations. For example sutures were reused after being disinfected and sterilised, Anaesthetists did not once wear gloves and many of the staff wore open toe sandals in theatre. Furthermore the laryngeal mask airways (LMA) and nasal tubes were not single use and these were not pre-packed individually, rather they were left exposed on an open trolley. Their justification was that the blood borne viral infection status of all patients was known pre-operatively, so extra precautions could be taken as necessary. On that note, each patient was subjected to a barrage of pre-operative blood tests and I'm not sure whether this was for any financial gain or because detailed medical records were not available.

Unlike the UK, there is no separate anaesthetic room and no safety check lists before the surgery commences. Scrub nurses do not perform a swab count and there is no separate sharps bin, so all needles are deposited together with other waste into one tub, to be subsequently retrieved after the surgery by a theatre aid.

The Operating Department Practitioner (ODP) was extremely knowledgeable and skilled, with many more responsibilities than his counterparts in the UK. For example the ODP would independently intubate and extubate patients and administer drugs. There would often be two operating theatres running simultaneously, with only one Anaesthetist and ODP.

#### *Objective 4*

*To reflect upon the health and social inequalities in India. To gain a more detailed understanding about the working anatomy of the head & neck region. To consolidate and further develop skills in history taking, examination and basic surgical procedures.*

Living in India for a considerable time and experiencing working life within a hospital has further highlighted the health and social inequalities in the country. Modern health care facilities are readily available in metropolitan cities, if one has the financial means to avail of them. In contrast, people from lower socio-economic backgrounds and rural communities rely upon 'learned medicine men' and Aurvedic practitioners, often accepting their 'fate' in situations of serious and terminal illness.

As such, it was heart warming and extremely humbling to witness the excellent charitable work that is being done at GSR. The hospital also provides an outreach service within Andhra Pradesh whereby 'cleft camps' visit rural villages, educating people about facial deformities and the treatment options available. Suitable cases are vetted and listed for treatment at the institute.

Unfortunately other than assisting, I did not have the opportunity to gain any hands-on experience. Before visiting the unit, I was not aware of the large number of trainees and highly specialised nature of cleft surgery performed at the unit. Furthermore after experiencing the highly pressurised environment in which the trainees were working, I was reluctant to request further surgical exposure. Nevertheless I have witnessed first-hand, the journey of cleft patients through a busy OMFS department and learned the principles of some of the surgical techniques employed. During my placement, I spent a considerable amount of time with the SALT team, who were all very friendly, knowledgeable and keen to teach me about the assessments they perform. This prompted me to perform a clinical audit within their department, for which they were most grateful.

#### *Summary*

Overall I had an extremely enjoyable experience at GSR, made particularly special by the warmth and hospitality of the people. The dedication of the trainees, some of whom were living away from their young children in far from ideal conditions, was truly inspiring and enabled me to contextualise my own grievances about training in the UK. Despite his rather unique style of teaching, Professor Reddy was always very polite and welcoming to me and I am most grateful for all the dinners and drinks to which I was treated while in Hyderabad! I would definitely recommend GSR for a future elective placement, but maybe only for 2-3 weeks, especially for singly qualified medics. I would like to one day return to GSR, perhaps during or after higher surgical training, so that I can fully appreciate and take advantage of the large case load and surgical expertise available.