

### Maxillofacial Surgery in Addis Ababa, Ethiopia

I travelled to Addis Ababa in Ethiopia as part of a complex surgical mission led by maxillofacial surgeons at Guy's Hospital. The aim on the trip was to provide treatment for children and young people with complex facial deformities. Access to healthcare in Ethiopia is practically non-existent even for basic medical problems and therefore children and young people with facial deformities go for years without treatment and when they do present to surgical missions from abroad their conditions have progressed to such a stage that they are often unrecognisable from their early presentations in the UK.

The charity employs local workers to go out to the countryside to recruit patients. The patients ranged in age from 3 to 47 years old. Due to their facial deformities and subsequent seclusion from society and lack of education many of the older patients required much support as had never been out in public before never mind away from their parents. The patients lived throughout the mission in a rehabilitation centre 40 minutes from the capital Addis Ababa. It was here that they were clerked, dewormed and fed high calorie diets prior to surgery, as many were chronically malnourished.

I arrived with the surgical team consisting of two British maxillofacial surgeons, a French plastic surgeon, two anaesthetists, one FY2 and three nurses. For the first two days the whole team was involved in the pre-operative assessment of 50 patients and the planning of their operations. The local plastic surgeons were also invited to these briefings which were a wonderful exchange of knowledge, local knowledge of conditions often unfamiliar to the British team from the Ethiopian surgeons and new techniques possible due to the sophisticated equipment and drugs brought from the UK from the British team.

Surgery lasted for two weeks with an average of 6 patients being operated on daily in two concurrent theatre lists. This provided an amazing opportunity for me to be first assistant to the surgeon in complex operations and practice suturing of complex wounds. The FY2 and I rotated, at any one time one of us being in theatre at Yekatit 12 Hospital while the other was in the rehabilitation centre organising patients pre-operatively to be sent to the capital for surgery and caring for the post-operative patients. It was very interesting learning how the surgeons had to adapt operations that they do frequently in the UK for tumours up to 20 times those usually seen in the UK.

After two weeks of surgery the surgeons departed and I was left in charge of post-operative care of the patients. I had cultivated a good relationship with the Ethiopian surgeons who were very useful and open to me bringing patients back to the hospital when inevitably some facial flaps failed and needed debridement and repair. At the busiest point there were 43 post-operative patients who required antibiotics and wound care, up to three times per day. This tested my organisational skills but I was very lucky to be working with five very capable Ethiopian nurses. Two were junior nurses and I particularly enjoyed being able to teach them about wound care, testing flap viability and even the basics of observations and when they should be concerned about a post-operative patient.

The younger patients and those who had undergone simpler operations were able to be discharged as early as 2 weeks post-op. It was my decision to discharge the patients and my responsibility to write their discharge letters and keep a photographic record of their journey from pre-op, on a five



day basis, to discharge. With this information I compiled a detailed power-point which I presented to the surgeons when I returned to the UK so they could see how their operations had worked out.

As occurs even in the UK with some of the best nursing care facial flaps commonly fail. I have spent a total of 17 weeks in years 4 and 5 in maxillofacial surgery and therefore felt very comfortable in caring for patients with facial flaps. The mainstay of their treatment was dual antibiotics and return for review by the surgeons. Three patients I chose to return to hospital, all of which required surgical debridement by the surgeons, which I was fortunate enough to be involved in.

During the surgical fortnight several patients had biopsies of masses of unknown pathology. Due to the poor health infrastructure in Ethiopia all the biopsies had to go to private clinics and the results took 4 weeks to get back. When they did return three patients who had been presumed to have ameloblastomas (benign but locally invasive tumours of the dental enamel) turned out to have poorly differentiated squamous cell carcinomas. As all of these patients were young it was difficult for me to accept that, as an Ethiopian junior doctor told me, 'Cancer here equals death, there is very little we can do.' Indeed the waiting list for radiotherapy, the main adjuvant therapy to surgery in the UK for all tumours of the head and neck, had a five year waiting list and was available in only one very expensive centre in the capital.

However I was able to organise for the patients to be brought to a meeting of all the head and neck surgeons at Yekatit 12 Hospital and together we were able to come up with a plan for each patient to ensure that they could get the best treatment available to them. It was particularly important to me as my elective period ended one week after I received the biopsy results and certainly felt responsible to the patients to ensure that they had some treatment otherwise they would be unable to access treatment themselves when they returned to their rural communities. The Ethiopian surgeons were very receptive, for example, one patient lived 700Km away but had a sister who lived in the capital. Therefore we arranged that she stay with her sister and come to the weekly meeting of all the surgeons on a Monday morning so they could consider a long-term plan for the resection of her tumour and the reconstruction of her jaw. Although not ideal or anywhere near the accepted standard of head and neck cancer care in the UK, I did feel that she would have a better chance than if no treatment was attempted.

The surgical mission to Ethiopia was undoubtedly the hardest six weeks work I have ever done, however it was also the most rewarding. I was able to use the knowledge I had gained during my several special study modules in maxillofacial surgery and the time I have spent with the maxillofacial teams from the London and Guy's in my own time. I was also able to use much of my general medical knowledge, for example when there was an outbreak of chickenpox among the children and I was required to plan and implement an isolation policy, or when the children had gastroenteritis to the point of dehydration and needed rehydration and eventual readmission to hospital. Even though these were simple medical tasks it was the first taste of responsibility for patients, although I knew I always had back up from the surgeons in the hospital, they were 40 minutes away and inaccessible at night.

I had an amazing experience in Ethiopia and learned a huge amount. I hope to return next year. My elective enabled me to experience the whole breath of the specialty and has served to reaffirm my ambition for pursue a career in maxillofacial surgery. (Word Count – 1256)