JLO Travelling Fellowship 1996 Report

A visit to Dr Gady Har-El, State University of New York (SUNY), Brooklyn

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Introduction

When looking for a way to increase my knowledge of sinonasal surgery, I wrote to the Residency Training Director of several large units in the US, which had a special interest in this subspecialty, and asked if I could come for a short period as an observer. Most replied favourably and I chose to go to the State University of New York (SUNY) at Brooklyn to work with Dr Gady Har-El M.D. largely because he wrote me a particularly enthusiastic reply. Another advantage of New York is that it is fairly compact and several major teaching units are concentrated in a relatively small area with good public transport. Shortly before I arrived Dr Har-El wrote to tell me that his practice had changed somewhat and he now only did tertiary referral level nasal surgery as his head and neck work had expanded. Nevertheless I felt that the purpose of the trip was not so much to learn a specific technique but rather to get a broad exposure to the practice of Otolaryngology in general in the US

I stayed in the student accommodation at the University Hospital of Brooklyn. This is adjacent to the hospital, library and a subway station.

The major teaching hospitals on the Brooklyn programme for residents in Otolaryngology are the University Hospital of Brooklyn (UHB), also known as Downstate Medical Center, the adjacent Kings County Hospital—a municipal Hospital dating from 1831—and the Long Island College Hospital (LICH). LICH is a private hospital situated in the fashionable Brooklyn Heights area and with magnificent views of New York Harbour, downtown Manhattan and its famous skyline. LICH is a half-hour subway ride from Downstate. Residents also spend some time at the Veterans Administration Hospital and Maimonides Hospital, again both within easy reach. By keeping in touch with the Chief Residents, I was able to attend whatever sessions most interested me at the various hospitals and divided my time between the Downstate campus and LICH.

Brooklyn is the largest of the five boroughs of New York City. The population is one of extraordinary cultural and ethnic diversity and, although officially close to three million, is probably a lot more as so many immigrants have settled in the region over the years. The volume and range of surgery on offer was staggering, particularly head and neck work for which the Brooklyn team is now renowned.

The Brooklyn programme

Head and neck cancer is all too common in the largely immigrant population served by the Kings County Hospital. Primary medical care for many is poor and late presentation the rule. I saw some very advanced tumours often with fungation through the neck or airway obstruction.

The Otolaryngology team undertake all the thyroid and parathyroid surgery at Downstate and had developed enviable expertise at this. There is a good working relationship with the Endocrine and Renal Medicine teams from whom most of this work comes.

I was struck by the greater reliance placed upon primary surgery rather than radiotherapy in the management of head and neck cancer. Many patients who, on this side of the Atlantic would have been given radiotherapy with surgery reserved for recurrence, had primary operative treatment. This was certainly the case with early laryngeal tumours and it gave me the chance to see both vertical and horizontal partial laryngectomies with what I have to say were very good functional results. The therapeutic approach to the neck was also different and various modifications of the traditional Crile radical neck dissection were in use. These included supraomohyoid staging dissections and accessory nerve preserving techniques and a good number of bilateral neck dissections with preservation of the internal jugular vein on one or both sides. The team at Downstate was certainly much more inclined to undertake surgery on the N₀ neck than most UK head and neck surgeons and had found that this often upstaged disease when the nodes were examined histologically and influenced subsequent radiation therapy. There was also a feeling that it was difficult to get many of these patients to comply with radiotherapy schedules or even attend for follow up and often "one shot" therapy represented the best option for them. CT scanning is regarded as "standard of care" for all patients with head and neck cancer and often resulted in disease being upstaged.

Another interest of the Department is the rehabilitation of the paralysed face and I was able to see facial hypoglossal anastomoses, some temporalis muscle transplants and eyebrow lifts.

Facial plastic surgery is an important subspecialty of Otolaryngologists in the US. The Director of Facial Plastic Surgery on the Brooklyn programme is Jon Turk M.D. With Dr Turk I saw a range of procedures including rhytidectomy, blepharoplasty, exfoliative dermal surgery, liposuction and mentoplasty.

There is a very enthusiastic Paediatric Otolaryngology team at Downstate headed by Dr Rosenfeld and Dr Ari Goldsmith. Their practice is exclusively paediatric and I saw many unusual paediatric airway problems including haemangiomata, tracheal stenosis and severe bronchomalacia. Brooklyn has a particularly large series of children with recurrent respiratory papillomatosis.

The training programme at Downstate is of extremely high quality. Otolaryngology in the US has now moved ahead of Ophthalmology and Neurosurgery to become the most sought after specialty in which to secure a residency appointment and places are fiercely contested. The Downstate programme has under the leadership of Dr Har-El and Chairman Dr Frank Lucente now moved up to be one of the most prestigious schemes in the US and justifiably so

Residents apply for slots in the "match" which is a centralized application process that coordinates entry at national level. Candidates, usually senior medical students, rank the various programmes and following a round of interviews the programme directors rank the candidates. A computer "match" process now takes place and the placements are published in January so that candidates are ready to start the summer they graduate from Medical School. Some 250 trainees enter the various programmes in the US annually. Candidates who have not secured a "match" may then reapply the following year or choose to compete for a match in another specialty as entry at the second attempt becomes even more difficult.

The residents were puzzled as to why we maintain the very cumbersome system of applying individually to every programme, and were even more alarmed when I explained that until very recently an aspiring otolaryngologist had to secure several successive training posts along the way all in open competition. I do feel that we need to streamline our selection process here in the interest of both trainers and trainees. Those lucky enough to get a "match" at Downstate now embark on an intense five year preparation for the testing Board Examinations. Residents on the Brooklyn programme work a long and exacting day. Rounds usually start at 6.30am and the schedule for the day is discussed with the attending physician at 7.00am. On call is in-house for the first three years on a one in three basis and with no "new deal" or ADHs! The working day rarely finishes before 8.00pm and may be much later if there is a long case. The day ends with a "business" ward round which all the residents attend.

There is ample operative surgical training under a high degree of supervision by the attending staff with an incremental increase in responsibility and in complexity of surgery as one progresses to become "Chief"—i.e. final year—Resident. Residents now do a further period of training in a subspecialty fellowship programme or go into practice but either way the Downstate graduates are superbly trained. In addition to the regular one-to-one teaching in the operating room and clinics, all trainees and attending faculty attend weekly grand rounds where there is formal didactic teaching often with guest speakers from other centres. Following grand rounds, there is a short break for pizza followed by an intense three hour session

in the temporal bone room finishing about 10.00pm! The newly-opened bone room is very much state of the art with nine fully equipped work stations each with a video link-up to the tutor's station. Residents and faculty alike are justifiably proud of this facility. I was able to participate in these sessions which were supervised by Dr Neil Sperling M.D. the Director of Otology.

Dr Sperling has a busy otological practice and regularly uses the argon laser for stapedectomy and intact canal wall mastoid surgery and had taught the residents so that they were also becoming proficient in the use of the laser in middle ear surgery. I saw some combined neurosurgical and otological surgery, in particular, an acoustic neuroma removal in a patient with neurofibromatosis and an only hearing ear.

Research is a strong part of the programme at Brooklyn and residents spend a full four month "block" on a specific research project. Here they learn laboratory methods if they so wish or they may opt for a clinical or audit type of project. Virtually no clinical work is undertaken during this period apart from "on call". Research at Downstate is under the supervision of Dr Joe McPhee Ph.D. He has published important work concerning the molecular biology of otosclerosis including a possible genetic marker for preclinical disease which can be recognized in a skin biopsy. I was able to see Dr McPhee's laboratories in use. Dr Goldsmith has constructed an animal model for tracheal stenosis using the rabbit and a technique of tracheostomy which involves a partial mucosal strip to induce scar tissue formation. This is used to study various factors which affect wound healing in the airway. Other ongoing projects are a study of the relationship between HIV infection and head and neck cancer. The team at Downstate have a vast experience of otolaryngologic manifestations of HIV infection as Brooklyn has one of the highest prevalence rates for HIV in the United States. Dr Lucente is a leading authority on this topic. One of their findings has been the high HIV positive rate in young patients with head and neck cancer—as many as 20 per cent of patients under the age of 45 so that testing for HIV infections in this age group is now routine.

Most of the attending staff performed endoscopic nasal surgery and the residents had clearly become highly proficient in the use of nasendoscopes which were used for all endonasal surgery. I was able to see some endoscopic procedures for the treatment of frontoethmoidal mucocoeles and CSF leaks. The microdebrider was regularly used and all nasal surgery is done using a video monitor which greatly facilitates teaching. There were also some total maxillectomies on the service during my stay and an extended craniofacial resection for an antroethmoidal tumour.

The Otolaryngology team at Kings County deal with a lot of head trauma including orbital fractures, midfacial injuries, fractures of the mandible and penetrating injuries of the paranasal sinuses. One of the residents reviewed the records on temporal bone fractures and was able to retrieve data on no less than 79 such injuries in children over a period of seven years. The County treats over 500 patients with gunshot wounds per annum and I saw one patient who required exploration of the mastoid to retrieve a bullet which had destroyed the cochlea and vestibule and shattered the facial nerve. It seems even more destructive injuries are associated with high volocity weapons which rarely lodge in the tissues but cause extensive destruction in a wide area around their path and are often fatal.

I attended a meeting of the New York Academy of Medicine where I heard Jatin Shah M.D., Chairman of Head and Neck Surgery at Memorial Sloan Kettering report his enormous personal series of craniofacial resections—more than 120 cases—and present a succinct review of the literature on this important approach.

Midway through my stay I attended the American Laryngological, Rhinological and Otological Society (Triological Society) meeting in Boston. The many distinguished speakers included the doyen of paediatric otolaryngology Dr Charles Bluestone, and Dr Hermes Grillo who recounted his vast personal experience in dealing with the challenging problems presented by tracheal stenosis. This is also an area where Dr Har-El's team have gained considerable expertise and I saw some cases of tracheal stenosis at Downstate.

I visited Dr Yosef Krespi in his office in Manhattan and saw him perform the LAUP procedure which he has popularized and also some office laser nasal surgery. Here I also met Dr Andrew Blitzer and saw some of the newest office laser equipment in use for laryngeal surgery under local anaesthesia.

It was interesting to hear the difficulties which American Physicians face in the wake of the enormous financial pressures the "managed care" era has ushered in. There were several compulsory redundancies at LICH while I was there and physicians were conscious of the intense scrutiny which insurance companies applied to all their clinical activity in an attempt to cut costs. It looks as if residency training programmes will be increasingly difficult to finance in the future. Also, economic as much as social pressure dictated that a large proportion of surgery was done on an ambulatory basis with patients admitted the morning of surgery to a "holding" area where they waited to go to the operating room and then discharged usually within a few hours of surgery. Procedures considered suitable for same day discharge included septorhinoplasty, all forms of facial plastic surgery, mastoidectomy, adult endoscopy, virtually all nasal surgery and adenotonsillectomy in both adults and children. A pre-operative stay is uncommon and most investigations are done on an outpatient basis.

Dr Har-El had arranged temporary faculty membership for me which enabled me to use the Professorial wing in the Medical Library. The library at Brooklyn is superbly stocked not only with books and journals but also with every conceivable modern electronic learning resource. I had access here to word processing, literature search and endless educational software. There was also unlimited use of the libraries Internet facilities so I could "surf" the now very considerable number of ENT resources available "On Line". Many North American Departments—and indeed individual physicians—now have their own websites and this is a good way of checking out what is on offer for intending visitors. The Brooklyn website is at http://www.hscbklyn.edu.

Conclusion

Many prestigious centres in the United States charge visiting fellows a tuition fee but despite the facilities made available to me in Brooklyn no such fee was payable. I felt that the faculty and residents were very proud of their unit and their programme and were more than happy to share their enthusiasm and their knowledge with me. They are a dynamic team of young physicians and it was a great privilege to work with them and learn from them. My feeling on finishing at Brooklyn was that the reputation American physicians have for collegiality and friendship is well deserved.

No trip to New York would be complete without some sightseeing and despite the chilly weather I was able to see the many architectural cultural and gastronomic wonders of New York City including some excellent walking tours of historic ethnic neighbourhoods and a Broadway show or two!

To any otolaryngologist in training who is looking for somewhere to go for a short period in the United States I would heartily recommend that they consider Brooklyn.