

ANDREW F. ALALADE's RONALD RAVEN FELLOWSHIP 2014 – REPORT

The New York Presbyterian Hospital-Weill Cornell Medical Center has been consistently ranked as the first in the New York City Metropolitan area, and one of the best in the United States. The hospital is a very busy one, with a neurosurgical faculty of 24 neurosurgeons. I had the privilege of being selected for the Minimally Invasive Endoscopic Brain and Skull Base fellowship with supervision by Dr Theodore Schwartz. Dr Schwartz is the David and Ursel Barnes Professor in Minimally Invasive Surgery at the institution, and is widely known for his work in minimally invasive endoscopy and pituitary surgery. The CSF leak rates following his endonasal endoscopic procedures are among the best quoted in the literature, so I was very keen to learn the nuances and techniques utilised during the surgeries. Dr Schwartz works closely with Dr Vijay Anand, an ENT/Endoscopic sinus surgeon and former president of the American Rhinologic Society.

The hospital was in the Upper East end part of Manhattan (a very busy part of New York), but patients seemed to come from New York, other states and even from overseas. The buildings were a mixture of old and new, proof that refurbishments must have occurred over the years to accommodate the increasing workload and changing times. The outpatient clinics and research buildings were separate from the rest of the hospital. The hospital itself is side-by-side with the medical school and its expansive Samuel J. Wood library. The Weill Cornell Medical Center is part of the Cornell university (one of the 8 U.S. Ivy League universities), but the University main campus is about 220 miles away in Ithaca.



I was at the centre from January to June 2017, working alongside other fellows, residents, nurse practitioners and physicians' assistants. There was also the Skull Base Innovation laboratory where skull base cadaveric dissections were done. This allowed me to spend some time studying and understanding the anatomy of the skull base (endoscopic and open) in a more detailed manner. Mondays, Wednesdays and Thursdays were usually spent in the operating room (O.R) while Tuesdays and Fridays were spent in the clinic. The week usually started off with a 7am M&M meeting on Monday where the residents presented cases from the preceding week. This was then followed by a Clinical governance meeting, where speakers were invited from all over the United States. During the week, there were also the Pituitary, Tumour and Epilepsy Board multidisciplinary meetings where interesting cases were reviewed and discussed.

The fellowship stint enabled me to learn a lot about endoscopic neurosurgery, especially regarding the endonasal skull base approaches. Tumours like pituitary adenomas, craniopharyngiomas, angiofibromas, Rathke's cleft cysts, epidermoid tumours, meningiomas etc where resected endoscopically with good outcomes. It was interesting to see the Neurosurgery-ENT collaborations during these cases. The pre-operative preparation, operative set-up, use of neuronavigation, utilisation of intrathecal fluorescein, techniques in raising a nasoseptal flap, gasket seal technique (using fascia lata and Medpor) etc were closely monitored by myself. I was able to appreciate the surgical indications for the transplanum, transclival,

transpterygoid approaches and the supraorbital craniotomies for olfactory groove meningiomas (through an eyebrow incision). I also saw a couple of endoscopic endonasal odontoidectomy procedures for ventral brainstem compression in pediatric patients with Chiari malformations.

It was interesting comparing the neurosurgical practices in the US with ours in the UK. Overall, treatment strategies were similar but the main differences were the role of private practice and an increased tendency to offer surgical intervention. There was a great research drive, with several projects going on in the clinical department, skull base innovations laboratory and the research laboratory. Multiple clinical trials were also being carried out in the hospital. I got involved in interesting skull base-themed projects, and published several papers and a book chapter.

A vibrant obligation to surgical training and education also runs through the ethos of the department. The neurosurgical residents, nurse practitioners and fellows work remarkably hard, with the daily routine commencing at 0600 and ending around 1900. I always seemed to see some sort of handover going on in the residents' room no matter what time of the day I was in the department. The residents all lived within the hospital accommodation, so it was extremely easy being onsite as soon as possible. There were about 14 residents, ably led by 2 chief residents. The team also had about 6 nurse practitioners who also participated in some clinical duties and helped fill rota gaps. I joined some of their weekly teaching sessions – this occurred every Monday, and usually lasted through the whole day apart from the afternoon break when they got served lunch. There was a huge emphasis on patient education was also apparent, with lots of pamphlets regarding surgical procedures provided. The patients also had easy access to the department, and the phone calls were promptly dealt with by the nurse practitioners or physician assistants. During the fellowship, I managed to discuss with the chair of the department, Dr Phillip Stieg about how he ran the department successfully despite the expected challenges associated with such a big institution. He shared some very invaluable advice about ensuring good training for every staff member and maintaining excellent team communication.

About 3 months into my fellowship, I travelled to New Orleans for the 27th North American Skull

Base Society (NASBS) Meeting. The theme of the meeting was “Mastery and Legacy in Skull base Surgery: Lessons in Synchronicity”. The meeting was held at the large Roosevelt hotel, and attended by over 500 neurosurgeons, ENT surgeons and other related health professionals. The main highlight of the meeting was the Albert Rhoton memorial. Albert Rhoton Jr was a brilliant neurosurgeon who taught many preeminent neurosurgeons and revolutionised neurosurgical approaches with his pioneering work in Neuroanatomy. It was heart-warming listening to testimonials from many of the neurosurgeons he trained, as they all spoke highly of him during their presentations. Personally, the other stand-out highlights for me were meeting familiar faces like Prof. Michael Gleeson, Prof. Alan Crockard and Mr Robert Bradford from the UK and Dr Adeleye from Nigeria. I gave 2 presentations from some of the work I did as a registrar at The National Hospital for Neurology and Neurosurgery (Queen Square), London. The feedback I received was enlightening, and I plan to submit some work for the 2018 meeting too.



As part of my fellowship, I also got to attend the “Advanced Endoscopic Skull Base and Pituitary Surgery 2017 course” in May 2017 alongside about 30 other skull base surgeons from all over the world. Dr Schwartz and Dr Anand were the course directors, and they oversaw the comprehensive 2-day course which combined didactic sessions on endoscopic skull base surgical techniques and treatment of related pathological conditions with cadaveric dissection workshops. This course helped me to understand a lot about endoscopic skull base approaches.



My experience at the Weill Cornell Medical Center helped to improve my skull base knowledge and expertise, and made me realise how a well-run skull base team can significantly improve a patient's healthcare experience. Discussions with patients should always involve all possible options, with an elaborate explanation of the associated pros and cons. It was an absolute honour to experience the skull base practice in this centre of excellence, and I am confident that the knowledge and skills gained will help shape my own clinical practice. Combining busy clinical duties with academic/research work was quite inspiring, and it definitely changed my perspective and gave me brilliant ideas to work on. I am grateful to Dr Theodore Schwartz, Dr Jeffrey Greenfield, Dr Vijay Anand and Dr Antonio Bernardo at the Weill Cornell Medical Center for the learning opportunities during my fellowship. I will also like to express my gratitude to the British Association of Surgical Oncology (BASO) for the award of the Ronald Raven Travelling Fellowship, which definitely helped during my time in New York.

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