

## The Journey of Enlightenment

Mohammad Ashraf

Travelling abroad to developed countries is an eye opener for many people but this can happen in a voyage in an opposite direction is the new reality that dawned upon me a couple of months ago. Not only was it a jaw dropping revelation, but it opened up new vistas of thoroughbred minds to me that have been of tremendous influence to my professional development and to an extent, solved an internal conflict that has plagued me since I set sail in two ships of medicine: one in Pakistan and one the UK. The conflict of how superiority is often associated with the tag of 'British/American trained' and not that of individual merit. It is the achievements of these thoroughbreds that I hope to bring to attention to the medical community of Pakistan as their achievements and more importantly the context and setting in which these huge feats were achieved, should be cherished in history as pride for the nation and a testament of how far an individual can go with traits of hard work, team spirit, resilience and perseverance. These traits are not strangers to any of us but perhaps are overshadowed by the one quality that in Pakistan represents excellence: The quality of being western trained.

The Department of Neurosurgery, Jinnah Hospital Lahore which is the academic department of Allama Iqbal Medical College Lahore Pakistan, was the destination for my clinical research as part of my SSE from the Wolfson School of Medicine, University of Glasgow. I wanted to experience rather antiquated methods of working and treatment, their outcomes, and suggestions for improvement. What blew my mind was the integrated and advanced facilities commensurate with the best of the best. Professor Naveed Ashraf, who is the heart and soul of this facility had trained this faculty in his career as residents and they now make up his department. The faculty and facility are one of the best in the country and the sheer beauty of this masterwork is the ultimate antithesis to the common belief of the superior western qualified doctor. These are all those who had qualified from Pakistan and trained here under Professor Ashraf. His Associate Professor Shahzad Hussain (FCPS), Assistant Professors, Nabeel Choudhary (FCPS), Usman Ahmad (FCPS) and Asif Raza (FCPS) and his Senior Registrar Dr Kashif Sultan (M.S) are to his credit. I write their post nominals not only to state their professional

qualification but highlight with joy that these are those of Pakistan.

### Fully Neurosurgeon Driven Neurocritical Care Unit (NCCU) and Brain Microdialysis:

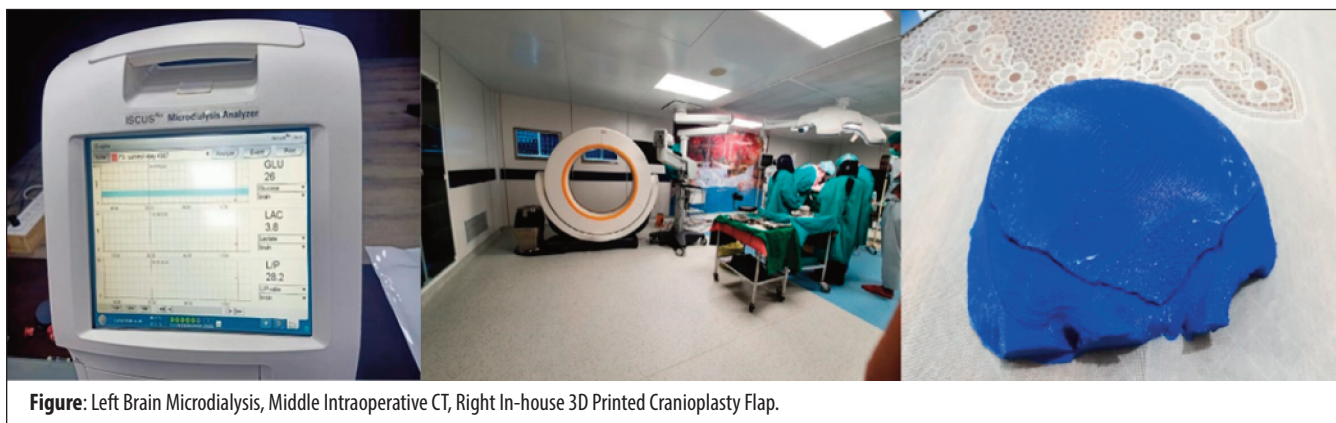
The NCCU is completely neurosurgery driven and every aspect from invasive ventilation and invasive pulmonary treatment like bronchoscopy is done by in-house neurosurgeons. The crown jewel of this unit is the advanced neuromonitoring which encompasses, ICP, ICPA, PbtO<sub>2</sub> and CPP monitoring. It has recently become a research centre for severe traumatic brain injury (sTBI) and subarachnoid haemorrhage by starting Brain Microdialysis (Figure), the first and only of its kind facility in the country and one very needed for sTBI, opening avenues for new treatments that may one day improve outcomes of these patients. sTBI is a pathology that many doctors often turn a blind eye to as I have unfortunately witnessed, a pathology that makes up perhaps most of the disease burden for the neurosurgical community, being neglected. It is here that these patients receive the care they deserve getting the best chance of life and it is the efforts of this team that has led to the establishment of such an NCCU that is the first in Pakistan and on par with internationally leading units.<sup>1</sup>

### Operation suite, intraoperative CT scan and simulation training: Benefit for the patient and the doctors.

It was astonishing to see the operation suite developed during the last few years. There are integrated operation rooms with facilities like stereotactic and endoscopic surgeries. One operation room is dedicated to spinal surgeries mainly. The whole complex is integrated for teaching with the academic area of the department and the outside world through audio visual means and high-speed internet. The gobsmacking presence of an intraoperative CT scanner (Figure) was one that left me humbled and inspired beyond description. A facility that most tertiary neurosurgical departments in the UK do not have is available in Pakistan and is being used in regular clinical practice. Its use is two-fold, with obvious benefit to patients as this new technology is being used for a comprehensive range of both cranial and spinal neurosurgeries, improving outcomes in some of the most devastating pathologies which require the complex

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**Figure:** Left Brain Microdialysis, Middle Intraoperative CT, Right In-house 3D Printed Cranioplasty Flap.

surgeries, from eloquent area brain tumour surgery to cranio-cervical junction instabilities.<sup>2</sup> In addition, it is being used to groom the third generation of Pakistani neurosurgeons allowing them to undertake clinical research projects which was immense pleasure to me as I stood in the operating theatre witnessing the recently inducted female trainee collecting data for her thesis which was a research project on par with international. I have no doubt this will greatly impact the practice of medicine in this area in both Pakistan and abroad. These trainees have an opportunity to practice their skills on a neurostimulator, something beyond imagination and it is the eleventh such simulator in the world and first outside North America providing trainees the opportunity to refine their skills in a safe environment and undoubtedly making surgery safer for patients, something Professor Ashraf has strived long and hard for.

This feat of excellence is something the Pakistani thoroughbreds were the first to introduce to the country and use it in the public sector where the most vulnerable and un-affording are reaping maximum benefit. There is no greater honour for the medical community knowing that they are helping those who cannot help themselves, those who do not have the ways and means to approach the 'top' Professor in the very private hospitals that often turn medicine into the a business akin to the hospitality sector.

### **Stronger together individual strengths used synergistically:**

It was of great inspiration to see how neurosurgeons with different skills were leading different areas of practice, in a culture where often the head of department is portrayed as the one-man army. Dr Shahzad leading the skull base and vascular neurosurgery, Dr Usman leading the academic teaching and pioneering spinal surgery and Dr Asif blurring the lines between pulmonology and critical care and neurosurgery by leading the neurocritical care unit and teaching and performing bronchoscopy and

advanced ventilation techniques. Dr Kashif shining with his administrative skills in addition to pioneering work on ICP monitoring, nearing the publication of his randomized control trial on the subject, an area where there is a marked deficiency in the literature. Dr Nabeel has integrated his expertise in IT and engineering into his speciality resulting in the production of indigenous customised 3D cranioplasty (Figure). The flap which otherwise takes a few good months and costs nearly 300,000 Rupees to be fabricated abroad is now being produced in the department in 3 days with minimum costs on a 3D printer making this another one of the many pioneering achievements of this team and the first in the country under the leadership of Professor Naveed Ashraf.

Seeing a culture where juniors are credited and acknowledged for their work is one of the reasons for their success. Every authority in medicine has acknowledged that they stand upon the shoulders of the giants before them.

I can say with certainty that the future of the speciality will undoubtedly stand upon the shoulders of Professor Naveed Ashraf and his team in the times to come.

After observing all that I have and knowing the journey of the man who is credited to be Pakistan's initial and currently sparse cerebrovascular neurosurgeon, who performed the country's first intra to extracranial bypass in 1995, pioneered and introduced endoscopic work to his profession,<sup>3</sup> pioneered work to national prominence on vascular neurosurgery<sup>4</sup>, being recognised as the surgeon who operates on aneurysms, cerebral arteriovenous malformations, arteriovenous dura fistulas, haemangioblastomas and intramedullary spinal cord tumours, diseases which are the most complicated operations even for neurosurgeons, is Pakistani born, educated and trained is something to be proud and cherished. An individual who on international platforms is proud of his country and proud of his profession. It has

made me conclude that Pakistan's magnum opus will always be their own and not the fictional 'western trained doctor'. It is high time we move beyond this rather trite and cheap equation.

### **The proud moment**

At the fag end of his career another fulfilling moment awaits him before the superannuation. Two of his mentees get promoted to regular Professors of Neurosurgery. One of them being the youngest ever and the other will be the first female of the country to have this distinction in government sector.

I would like to conclude with my final thoughts of what Glasgow University's head of medicine dentistry and life sciences, a man of international prominence, had imparted to us on my first day as student. That despite being affiliated with Glasgow, an institution that has progressed the practice of medicine internationally for centuries and one of the premier institutions in the world as our alma mater, we are to define ourselves by our humility, empathy, clinical acumen and desire to help humanity, not by our institution alone. I mention this as too often have I seen a toxic culture of the so called 'top' medical colleges looking down on others, particularly the private ones. The foreign trained doctors being in groups that often politically oppose those who are not. It is very much desirable to be proud of one's alma mater but unacceptable to use it as an excuse to portray yourself as superior to others. This is a mentality, as a nation we need to come out of. By this logic having my MBChB from Glasgow medical school and a research BMedSci in clinical neuroscience from an institution that people from Pakistan cherish to come and train in and often think of being the most superior and the farthest a person can go should make me the best doctor in the country. A foolish thought to even conjure and a notion I strongly reject.

I wish to dedicate my life, based on my individual merit and competency, to the people of this country something I

hope will one day be to the standard of my thoroughbred role models in Lahore, PAKISTAN! rather than my place of education and training. It is high time we move past meaningless labels and identity politics and judge our colleagues based on their individual merit and ability. Relinquishing this mentality from our medical community is not enough, it must be removed from the general public if we are to do justice to our local doctors lest they be viewed as second class citizens in their own country. This opinion piece is not meant to attack foreign trained doctors in any capacity whatsoever. They have made individual contributions that should be acknowledged. However, the more subtle and sinister superiority complex that I have elaborated on is something to be fought against.

I am humbled more and more each time I visit the medical community in Pakistan and I am grateful to Dr Fatema Jawad for giving me this platform to express something I know all of us Pakistanis feel strongly about and to highlight those who have dedicated their lives for a higher purpose and to those the community owes a debt of gratitude.

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