Iype Cherian

It was on a September afternoon that Iype Cherian took the decision to go to Nepal. When Dr. Mathai (who is now the senior most Neurosurgeon in India) asked him over a cup of coffee at his home, even he did not expect to say yes. And along with him, and Iype Cherian wife, he was also shocked.

He had two little children, a good job as a consultant Neurosurgeon at his hometown, and was earning good and had nothing better to ask for. Nepal was a foreign country, and the place was in turmoil, with the last phase of the king being deposed by the Maoist rebels [1)].

At home, everybody tried to persuade him out of the decision, but he stood firm.

They landed in Kathmandu in the height of winter in December.

He had never seen that type of cold and at that time there was 16 hours of power outage and absolute water shortage. He wanted to go back the very next day. But they had almost uprooted ourselves, sold the cars, transported the household things to Delhi (They later discovered that it was very costly bringing it to Nepal and we were not sure as to the period of our stay) and got the children out of their school. So they thought they will battle it out for some time and then get back to India. He started work in a corporate Hospital owned by Nepal's premier Neurosurgeon.

Thing were going good, but he was not happy. He were seeing only the rich and famous of Nepal and this was not precisely what I came for. He were very well looked after for and the Neurosurgeon was doing a good job along with the other ten Neurosurgeons in the Kathmandu valley (which was the total number of Neurosurgeons at that time in Nepal). I thought, I was not really needed there. So we decided to go back to India.

However, they wanted to visit Pokhara, before we go back since it was a very beautiful place and we were not sure as to whether we will ever comeback. By sheer chance, we met somebody who told us about a Hospital which was run by an Indian group and we decided to visit it. The hospital was huge and located at one of the most beautiful places that I could imagine.

Pokhara

It was a 700 bedded multispecialty hospital and they had been on the lookout for a Neurosurgeon for quite a while. There was no Neurosurgeon for the whole western region of Nepal with about 20 million population.

I knew I was going to take up a difficult job. The administration agreed to provide free treatment for poor patients and we started the Department of Neurosurgery on the 18th of April 2008.

We were not equipped at all and we had to gather instruments from other surgical specialties.

Thankfully there was a primitive Hudsons brace and we could do craniotomies. I assembled a team of two interns and we started work. It was pretty busy and it started getting busier. Initial cases were all trauma and I was continuously on call.

Then the tumours started comin and the first one which came was a shocker, to say the least. The 12 year old boy was dying and his relatives wanted to take him home. The scan showed a huge multicompartmental craniopharyngioma with gross hydrocephalus. I explained the possible poor

prognosis and operated on the child. We did a frontotemporal craniotomy, opened the sylvian and took out the tumour through the optico carotid and interoptic corridors. We also opened the lamina terminalis. The child did well and later came to us with the post op MRI at one year showing no evidence of tumour. His vision did not improve considerably though.

Then we had a spate of cases, a mixed bag of spine, vascular, skull base, pediatric and neuro oncological cases. Our instruments were limited and the microscope was a uni axial ENT microscope. But we managed to have good results, using pre-operative planning and improvisation for every other case. I do think that the God factor was with us, since he knew we had so many lacunae. I would wish to acknowledge Him as the main factor that brought about good results in such difficult conditions.

Over the next one year we had more than a few interesting cases. I know I have done nothing new, but it was a challenge doing these cases with primitive instruments, an uniaxial microscope and most often a Nurse and an intern to assist.

There was a ventrally placed large C2 meningioma in a 65 year old lady which we excised totally using a far lateral approach. She improved from Nuricks grade 4 to Nuricks grade 13 and the postoperative scans show no tumour.

We do not have an angiogram and so we do the direct carotid angio, recording it with a video cam and later looking for the aneurysm. And the first aneurysm that we opertated was an emergency. We did not have clips and we had to clip the bleeding aneurysm with laparoscopic clips. I guess we have moved on and we have good results now with aneurysms and we have Sugita clips.

We also had a few skull base cases like a giant olfactory groove meningioma which we completely excised, a planum sphenoidale meningioma, and a few craniophyaryngiomas. There were a lot of spine cases. We did quite a lot of microlumbar discectomies with good results and traumatic spine cases were common in this place. We successfully did an odontoid screw, transpedicular screws, instrumented and uninstrumented corpectomies, posterior fusions, lateral mass screws and lateral extracavitatory approaches for the thoracic spine.

There were a few giant CP angle tumours which we did in sitting position

We have been able to get a House and Brackmann grade 3-4 facial in these tumours with total resection. We operate with the patient in the sitting position and the microscope is placed over two standing stools taped together for the height adjustment. We also did a few posterior fossa tumours and a brainstem cavernoma with radical excision and good preservation of neurological function.

In April 2008, Dr. Garnette Sutherland from the University of Calgary visited the hospital and was very helpful with his suggestions to improve the Department.

In June 2008, he had the chance to be in Fujita and learn vascular neurosurgery from the team there. I consider it as a great honor to learn from and assist Dr. Sano and Dr. Kato. The vascular surgery at our center has improved by leaps and bounds after the visit.

In January, 2010, I was able to visit Nanjing and spend some time with Professor Tan, which was very helpful in cementing the concepts of epilepsy surgery.

The Mountain Trust UK a charitable NGO, and its Chairman, Mr. Charles Malcolm Brown had been very helpful in trying to help the poor patients of Western Nepal. At times we have patients who cannot pay even for a scan and the Trust has been very helpful in financing these patients as well as paying

for the food and rehabilitation for deserving patients. They are trying to arrange an ambulance for the remote areas, where patients has to be carried on their backs to the places where there are roads.

We hope to start a residency programme in 2 years and once we train a couple of dedicated Nepali Neurosurgeons, we hope to run the department in a better way. It had been an uphill struggle, but it has been very rewarding. We hope to improve as the years go by and fulfill the dream of having a centre of excellence for Neurosurgery in Nepal [2)].

Publications

Cherian I, Grasso G, Bernardo A, Munakomi S. Anatomy and physiology of cisternostomy. Chin J Traumatol. 2016 Feb 1;19(1):7-10. PubMed PMID: 27033265 [3)]

Munakomi S, Bhattarai B, Srinivas B, Cherian I. Role of computed tomography scores and findings to predict early death in patients with traumatic brain injury: A reappraisal in a major tertiary care hospital in Nepal. Surg Neurol Int. 2016 Feb 19;7:23. doi: 10.4103/2152-7806.177125. eCollection 2016. PubMed PMID: 26981324; PubMed Central PMCID: PMC4774167 [4)].

Cherian I, Bernardo A, Grasso G. Cisternostomy for Traumatic Brain Injury: Pathophysiologic Mechanisms and Surgical Technical Notes. World Neurosurg. 2016 May;89:51-7. doi: 10.1016/j.wneu.2016.01.072. Epub 2016 Feb 4. PubMed PMID: 26851743 [5)].

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