APSS MEDTRONIC FELLOWSHIP REPORT

01 November 2022 to 31 January 2023

Fellow: Dr Rohan B. Gala

MBBS, MS (Orthopaedics), FASSI (Spine Surgery)

Assistant Professor and Consultant Spine Surgeon, Department of Orthopaedic Surgery, D.Y. Patil Medical College, Nerul, Navi Mumbai & D.Y. Patil Healthcare

Host: Dato Professor Dr. M.K. Kwan — University of Malaya, Kuala Lumpur Malaysia

I was selected for the Asia Pacific Spine Society (APSS) – Medtronic Fellowship which was scheduled in March 2020 for a period of 3 months. Due to the COVID-19 pandemic, it was postponed repetitively, however, the APSS secretariat was persistent and was continuously looking for alternatives. Nearly 2 years after my original appointment, I was given the confirmation that my fellowship would commence in November 2022 at University of Malaya, Kuala Lumpur, Malaysia. I would first take the opportunity to thank the APSS Fellowship Committee, and the APSS secretariat, especially Jennifer and Kaelyn for their persistent hard work in rescheduling this fellowship which was supposed to commence in 2020 to the year 2022. They were constantly in touch with me during the pandemic. Thereafter they ensured that the entire process right from my fellowship application, visa, travel arrangements and accommodation was smooth. They worked exceptionally well in arranging everything in time so that I could start my fellowship as planned.

On my arrival, Jennifer and Kaelyn ensured that my airport transfer was arranged and the registration process at my accommodation was smooth. The studio provided to me was extremely spacious, with access to the swimming pool and gym and was conveniently located from the

university. The local stores and restaurants were within walking distance thus ensuring that I devote maximum time to my training and focus on learning.

I was introduced to the Spine Research Unit (SRU) at University of Malaya. The Spine Research Unit comprised of Professor Dato Dr Kwan Mun Keong, Professor Dr Chris Chan Yin Wei, Associate Professor Dr Chiu Chee Kidd and Dr Chung Weng Hong, Josephine and Mariam. Josephine and Mariam gave me an orientation tour of the university hospital and the campus. They also ensured that I obtain my ID at the earliest and provided me with a detailed weekly schedule prior to my commencement.

UNIVERSITY OF MALAYA MEDICAL CENTRE		UM Spine Team Weekly Roster 2022			UNIVERSITI M A L A Y A	
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
07.00 - 08.00		Spine Teaching + Preop Presentation	Spine Teaching	Spine Teaching Preop Presentation	Ward round	
08.00 - 09.00	SRU Meeting	Long Case Teaching for MS Orth OT	OT	от	Long Case Teaching for MS Orth	от
09.00 - 13.00	Spine Clinic				Scoliosis Clinic	
13.00 - 17.00	Research				Research	
17.00 - 22.00					ОТ	

Clinical Meetings

Clinical meetings were held twice weekly where we had pre-operative case presentations. These meetings mainly focused on clinicoradiological evaluation and surgical management options. They were discussed in front of faculty, fellows, postgraduate and undergraduate students.

There were frequent case presentations by postgraduate residents with an important takehome message or highlighting an important rationale. I thoroughly enjoyed these discussions and I was constantly encouraged by the entire team to share my views.

I had an amazing opportunity to understand the functioning of a high-volume scoliosis centre, not only in terms of patient screening, assessment and counselling but also surgical execution, post-operative management and rehabilitation. This centre mainly focuses mainly on Adolescent Idiopathic Scoliosis (AIS) amongst other types of scoliosis.

The entire team of SRU ensured that I understand their algorithms for offering conservative and operative management. User-friendly EMRs with easily retrievable patient data helped me a lot to study long-term follow-ups and understand the natural history not only of spinal deformity, but also other sub specialities like degenerative, trauma, infective and tumour pathologies

Spine and Scoliosis Clinic

We had spine clinics every Monday where the patients were assessed in detail and those requiring surgery were counselled and explained with smart and easy-to-understand audio visuals and pictorial representations of spine highlighting their pathology depending on its location and explaining the risk-benefit ratio of any intervention that needed to be performed for degenerative, traumatic, infective, tumour and other pathologies.

We had the scoliosis clinic every Friday where I was exposed to a variety of deformity cases both operative and those managed conservatively. I had the opportunity to review and discuss the long-term operative follow-ups, growth rod graduates & brace graduates. Also had the opportunity to see and perform MAGEC expansion under supervision. The hospital is also equipped with a brace lab where patient-specific braces are made using 3d printed technology and a dedicated rehabilitation centre comprising of physiotherapists, occupational therapists and nursing staff.

Academic Activities and Workshops

Apart from the routine weekly clinical meetings and academic teaching, I had the privilege to participate in the Basic Spine Operative Course as faculty held in November 2022 teaching PG students and young Orthopods. Basic lumbar degenerative procedures and various fixation methods were demonstrated on Saw Bone. I also had the opportunity to speak on recent advances in Spine Tuberculosis. The Spine Instructional Course held in January 2023 organised by the SRU and NOCERAL (National Orthopaedic Centre of Excellence for Research and Learning) hosted post-graduates from various corners of the country. It was a wonderful crash course combining both clinical case presentations with interactive and didactic lectures. I thank Professor Kwan and the entire team of SRU for inviting me to deliver two lectures at this event.

I participated in the advanced operative scoliosis course organised by the SRU. Not only did I interact with colleagues from India who had visited the University for the course but also got an opportunity to socialise with them.

Operation Room

In the OR, I was privileged to see a large number of deformity cases including some severe curves (AIS, NF and Congenital) apart from traumatic, degenerative and infective and metastatic patients. Supervised bending views in AIS, the importance of lower limb scannograms in cases with pelvic obliquity, calculating UIV and LIV tilt angles pre operatively were few points I would incorporate in my planning of AIS cases.

The use of T bar, the concept of two surgeons operating simultaneously on the spine(Left side and right side), safety during free hand pedicle screw and extrapedicular screw insertion all

lead to significant reduction in the operative time, blood loss and perioperative complications during deformity corrections thus leading to desired outcomes. This centre also stressed the importance of neck tilt and shoulder balance during correction. All faculties ensured that I am actively involved in various procedures and also encouraged me to spot the difference and discuss them. This broadened my view as a surgeon and I realised that there are many ways to approach any case but the appropriate one is that which is reproducible, safe and works best in your hands thereby leading to an optimum outcome. I still remember one of the Saturdays when the entire team was instrumental in operating 4 scolioses. I was privileged to dine in with the entire unit on several occasions including the one where I received my fellowship completion certificate from the SRU at the Royal Bedouin

I thank the entire team of SRU at University of Malaya and APSS for ensuring that I learn, share and make memories that will be cherished for life.