

# **APSS Depuy Synthes Spine Travelling Fellowship**

## **Group 2 – Report**

**12<sup>th</sup> March to 6<sup>th</sup> April 2019**

### **Group 2 (A) Fellows –**

#### **Dr. Sohael M Khan (India) –**

Assistant Professor & Consultant Spine Division, JN Medical College, Wardha, Maharashtra, India

#### **Dr. Kyaw Soe Naing (Myanmar) –**

Consultant surgeon, spine unit (Yangon Orthopaedics Hospital), Yangon, Myanmar

#### **Dr. Ran Kang (China) –**

Consultant surgeon, Spine Unit (Jiangsu Province Hospital on Integration of Chinese and Western Medicine), Nanjing, China

### **Group 2 (B) Fellow –**

#### **Dr. Nur Alam (Bangladesh)**

Consultant Orthopaedic Spine Surgeon, NITOR Hospital, Dhaka, Bangladesh

**Host Center – Prof Zhuojing Luo, Xijing Orthopaedic Hospital of The Fourth Military Medical University, Xi'an, China**

### **12<sup>th</sup> March 2019**

We all arrived in Xi'an, China in morning around 11:00 AM. Dr. Xie came to receive us at the Airport. Dr. Ran Kang came by Train and Dr. Xie had gone to receive him. Dr. Xie made sure that we all were comfortable and well settled in the Hotel. After we checked in Dr. Xie took us for Lunch and he also showed us the hospital. The Hotel provided by APSS was fantastic. The rooms were very big and with a nice view. We were able to see the hospital from the Hotel Room.



**Picture taken with Prof Hu after the Lecture Session.**

### **13<sup>th</sup> March 2019**

We all were ready in morning at 07:15 AM waiting in the lobby for Dr. Xie. Dr. Xie took us to the hospital and showed us around the hospital. He also gave us a brief idea about the hospital. The hospital was huge with lots of patients. We then went to the Orthopaedic Department. Prof Dr. Luo and Prof Dr. Hu greeted us and we attended the Morning Meeting of Orthopaedic Department. After the morning meeting we met the entire faculty working in Department of Spine Surgery. We later went with Dr. Luo and his team for grand rounds. The grand round session was very interesting as we discussed a lot of cases on the rounds. Pre - op management, post - op management and care plan of each patient. Dr. Luo was kind enough to show us the Lora system developed by him. We were then taken to the research wing of the hospital where we saw a huge variety of research projects which were going on in Department of Orthopaedics at Xijing Hospital. We finished our work by 06:00PM and then we headed back to the hotel.

### **14<sup>th</sup> March 2019**

We reached the hospital at 07:00 AM and directly went to the OR. There were 2 cases of Prof Hu posted. The first case was Anterolisthesis of L4 - L5

with bilateral lower limb radiculopathy the patient was managed with Open TLIF for the same and the second case was PIVD L3 - L4 level it was managed with Open TLIF L3 - L4 level. Prof Hu was very kind to us. He explained us each and every step while performing the surgery. Especially the Anterolisthesis case he told us the different techniques of reduction. We were in OR till 06:30 PM after that we left for the hotel.



### **Case Discussion with Prof Luo in out patient department**

**15<sup>th</sup> March 2019**

We all reached hospital at 07:00 AM. We then attended the morning class, which was held in the department. After class we went to the OPD with Prof Hu. The out patient department was filled with patients. Prof Lu had appointments for Spine Consultation. Prof Hu explained us all the complaints of each patient he saw and gave us the brief management perspective of the same. We discussed pre & post - op management of almost all the operative cases. We then went to OR in afternoon as Prof Hu had a case posted. The case was PIVD C4 - C5 and the plan was ACDF C4 - C5.

## 16<sup>th</sup> March 2019

We went to the hospital at 07:00 AM and directly went to the OR as today there were 3 cases posted. The first case was Kyphoscoliosis Deformity at Thoraco - Lumbar Junction and the procedure performed was Deformity Correction and Fixation from T9 to L3 level. The second case was C4 - C5 - C6 cervical disc disease the patient was managed with Laminoplasty and the third case was also Cervical Disc Disease from C4 to C6 this patient was also managed with Laminoplasty. Prof Hu explained each and every step of Laminoplasty and demonstrated how the plate fixation is to be done.



Xijing Spine Department with Group 2 APSS Travelling Fellow

## 17<sup>th</sup> March 2019

Leisure day

## 18<sup>th</sup> March 2019

We all went were ready in morning at 07:15 AM. After breakfast went to Hospital. Today we had Clinics of Dr. Luo and then we had 2 Multiple

Cervical Disc Disease patient posted for OT. Dr. Luo had planned these cases for Multi level Laminoplasty and Fixation. Our Clinic Started at 08:00 AM. Dr. Luo was very kind to us he explained us and gave us a brief about each and every patient he saw in the Out patient department. We had a discussion in between regarding the management plans and how to go ahead with each case.



**Group 2 Picture with Prof Luo after the Laminoplasty case**

**19<sup>th</sup> March 2019**

Departure to Taipei

**Host Center – Assoc Prof Shu-Hua Yang, National Taiwan University Hospital, Taiwan**

**20<sup>th</sup> March 2019**

We all got ready at 07:00 AM and were in lobby waiting for Mr. Michael. He picked us up and took to National University of Taiwan. The University looked huge from outside. Assoc Professor Shu-Hua Yang greeted us at the

mail entrance. He then took us to the department of Orthopaedics and there we met the Chief of Orthopaedics. Assoc Prof Yang took us to the Presentation room where we saw 3 presentations. The first presentation was by Dr. Huang Ting - Chun on A spinal Stenosis case treated with PELD via Interlaminar Approach under Local Anaesthesia in an Out patient setting. The second presentation was by Dr. Chih - Wei Chen on Bilateral Wiltse approach through one single skin incision for Lumbar Surgery. The third presentation was by Assoc Professor Shu-Hua Yang on Different types of Spine Osteotomy. After the presentations we went to the operation theatre. There were 2 TLIF posted for that day. Assoc Prof Yang performed the surgeries both surgeries were Minimal Invasive Spine surgeries with one Incision. After the OR we had discussion regarding those cases. We had our Lunch at Hospital. After the OR Prof Yang showed us around the University. He took us to the outpatient department and showed us the University building and the hospital museum too.

We then went back to hotel around 05:30PM and took rest for some time. The day was well spent with two MIS case and a new technique learned single approach MIS TLIF.



**Group Picture with Assoc Prof Shu-Hua Yang, National Taiwan University Hospital, Taiwan**

## 21st March 2019

We got up and we were ready in Hotel Lobby at 07:30AM Mr. Michael to take us to Taipei Veteran Hospital. We reached the hospital in 30 minutes. We were then taken to the Chief of Spine Surgery of Taipei Veteran Hospital. We went to the presentation room where we saw the Hospital orientation video. After the presentation we then went to the OR. Prof Zhang was performing Anterior Cervical discectomy case of C4-C5 level. Prof Zhang had 4 cases posted for today. After ACDF he did Navigation guided L4-L5 TLIF. As soon as he finished TLIF he took us to a Japanese Restaurant for Lunch. After Lunch we got back to the OR. He then performed case of PIVD L3 - L4 with Right lower limb radiculopathy by TLIF L3 - L4 level.

We also observed an O - Arm navigated MIS TLIF at L4 - L5 in a Anterolisthesis L4 - L5 case. The 4<sup>th</sup> case was PIVD L4 -L5 in which Open TLIF L4 - L5 was done. The day was very tiring as we observed back-to-back 4 cases. After the OR we went to the department where we presented our papers and abstract of spine surgeries. We came back to hotel at 09:00 PM.



**Group 2 with Team of Orthopaedic Department of Taipei Veteran University.**

## 22<sup>nd</sup> March 2019

We left from the hotel at 06:00 AM and took a high-speed train to Taichung. It took 1 hour to reach Taichung. We visited China medical University, Taichung. Our mentor for China Medical University was Asso Prof Hsien Te Chen. We directly went to the OR and there were 3 cases posted by Asso Prof Chen. The first case, which we saw, was Lumbar Disc Disease L4 - L5 and was managed with O Arm Navigated Endoscopic Discectomy L4 - L5. The second case of Anterolisthesis of L4 - L5 with bilateral lower limb radiculopathy, which was managed by O - arm Navigated MIS TLIF L4 - L5. The third case was 11 months Old non - union fracture D12 vertebra with Implant failure that was managed with D12 Corpectomy with extension of posterior fixation and cement augmentation. After the OR we left back to Taipei by High Speed train to attend Taiwan Spine Society inaugural programme. It was a great leaning experience at China Medical University and we were lucky enough to attend the Taiwan Spine Society dinner and network with all the Taiwan Spine Surgeons and Surgeons from other countries too. After the dinner we went to the hotel.



Group 2 with Asso Prof Hsien Te Chen



## 23<sup>rd</sup> March 2019

We left from the hotel at 06:45 AM and went to 2019 Annual Meeting of Taiwan Spine Society. The sessions were interesting with lots of interaction with international faculty and lots of learning. We were also invited to attend the Gala Dinner. After Gala Dinner we left for the hotel.



Group 2 Attending 2019 Annual Meeting of Taiwan Spine Society

## 24<sup>th</sup> March 2019

Leisure day

## 25<sup>th</sup> March 2019

We left from the hotel at 07:15 AM went to Taipei Medical University. Taipei Medical University is nearest to Taipei 101. Prof Huang greeted us as we entered the department. We went to the Department of Orthopaedics and we had our presentations. After the presentation we went to the OR. The first case was PIVD L3 - L4 that was managed with Endoscopic Discectomy by L3 - L4. Dr. Wu Max performed the case by Posterior Endoscopic Lumbar Discectomy Approach. The second case of Anterolisthesis of L4 - L5 with

bilateral lower limb radiculopathy that was managed with L4 - L5 TLIF. The third case was PIVD L5 - S1 that was managed with L5 - S1 TLIF. Prof Huang performed both of the cases. After the OT we went back to the hotel.



Group 2 with Dr. Max



**Group 2 with Prof Huang and Team**

**26<sup>th</sup> March 2019**

Departure to South Korea

**Host Center – Prof Ki-Tack Kim, Kyung Hee University Hospital, Korea**

**27<sup>th</sup> March 2019**

We went to the hospital at 07:00 AM in the morning. We met Dr. Ki Tack Kim. Dr. Ki Tack Kim briefed regarding the working of the Spine Department and the doctors in the spine team. He took around and showed us the department and spine work, which they do in the University Hospital. We later met Prof Ha and he was very kind to us. He took our lecture on “AIS presented to 6 Spine Surgeons Large Variability even in small experienced group.” The day was exciting where we got to meet eminent and senior most faculty of the university and we had a good exposure to all the work done by Prof Ha. We left from the hospital at 06:00 PM.



**Group 2 with Prof Ki Tack Kim**

**28<sup>th</sup> March 2019**

We went to the OR to see one case i.e. PIVD L3 - L4, L4- L5 managed by TLIF L3-L4, L4-L5 by Prof Yong Chan Kim. After the OR Prof Yong Chan Kim took us to the department where he showed us the Spine work that he does in the daily routine practice. We left from the hospital at 07:00 PM.



**Group 2 with Prof Ha**

### **29<sup>th</sup> March 2019**

We reached the hospital at 07:00 AM in the morning. Today we had to go to OR as there were 3 cases posted by Prof Kim. The first cases that we observed were Lumbar Canal Stenosis L4-L5, L5-S1 with bilateral lower limb radiculopathy the patient was managed with Posterior Decompression with fixation at L4-L5-S1 and Interbody cage augmentation from anterolateral aspect. The second case that we observed was Old operated case of fracture L1 vertebra with implant failure and patient was managed with Posterior Decompression and extension of Fixation 2 levels above and 2 levels below. The third case was Old operated case of PIVD L3-L4 vertebra with adjacent level degeneration at L4-L5 the patient was managed with open TLIF L4-L5 with extension of fixation. We got the chance to learn a lot of new thing and techniques. We left the hospital at 07:00 PM.

### **30<sup>th</sup> March 2019**

We reached the hospital at 08:00 AM in the morning. We went to the OPD with Prof Kim and saw different types of cases. We discussed each and every

case with Prof Kim. We also discussed pre op and post op plan with him. We had an extensive discussion on deformity correction where Prof Kim taught us a lot regarding the importance of Saggital balance. We were relieved by 03:00 PM and we headed back to the Hotel.

### **31<sup>st</sup> March 2019**

Leisure day



**Group 2 with Prof Yong Chan Kim**

### **1<sup>st</sup> April 2019**

We reached the hospital at 07:30 AM. Today we had 2 cases posted at OR. The first case was Old operated case of PIVD L5-S1 vertebra with adjacent level degeneration of L4-L5 level. Prof Yong Chan Kim operated the case by doing Open TLIF L4 - L5 level with extension of the fixation. The second case was of Lumbar canal stenosis L2 - L3 - L4 - L5 level with bilateral lower limb radiculopathy it was managed with Posterior Decompression and Spinal Fusion at L2 - L3 - L4 - L5 level. Prof Kim was very generous to us he allowed one fellow to get scrubbed in each case. We had a fruitful discussion

pre and post the OR. We finished the case at 05:30 PM. After the OR we left for the hotel.

## **2<sup>nd</sup> April 2019**

We left for the hospital at 07:00 AM and directly went to the OR. This was the last day of our APSS Travelling Fellowship. Today Prof Ki Tack Kim had a case of Ankylosing Spondylitis with Kyphosis deformity professor Ki Tack Kim performed the surgery by doing Deformity correction with fixation at D6-D7-D8, D11-D12-L1 level. We observed the surgery closely and go to learn a lot from the same. Prof Ki Tack Kim demonstrated all the steps of his surgery one by one. It was a wonderful experience to see such a great surgeon operate and teach the fellows. The second case was of Lumbar canal stenosis of L4 -L5 level which was operated in 2 stage. Earlier decompression and posterior screw insertion was done and then in second stage anterolateral decompression and cage placement was done and then the patient was turned and posterior rod placement was done.

Finally we finished the fellowship and we had made a lot of memories and friends. It was the best experience of our lifetime.



**Group Picture with Prof Ki Tack Kim**

**4<sup>th</sup> April - 06<sup>th</sup> April 2019**

**APSS - APPOS 2019, 12<sup>th</sup> Combined Meeting of Asia Pacific Spine Society & Asia Pacific Paediatric Orthopaedic Society**

**LOG BOOK -**

No	Date	Diagnosis	Procedure	Surgeon
<b>Xijing Orthopaedic Hospital of The Fourth Military Medical University, Xi'an, China</b>				
1	14/03/2019	Anterolisthesis L4 - L5 with bilateral lower limb radiculopathy	Open TILF L4 - L5	Prof Hu
2	14/03/2019	PIVD L3 - L4	Open TILF L3 - L4	Prof Hu
3	15/03/2019	PIVD C4 - C5	ACDF C4 - C5	Prof Hu
4	16/03/2019	Kyphoscoliosis Deformity	Deformity Correction and	Prof Luo



		Thoraco Lumbar Junction	Fixation from T9 to L3 level	
5	16/03/2019	C4 - C6 Cervical Disc Disease	Laminoplasty	Prof Luo
6	16/03/2019	C4 - C6 Cervical Disc Disease	Laminoplasty	Prof Luo
7	18/03/2019	C3 to C6 Multilevel Cervical Disc Disease	Laminoplasty	Prof Luo
8	18/03/2019	PIVD C4 - C5 level	ACDF C4 - C5 level	Prof Luo
<b>National Taiwan University Hospital, Taiwan</b>				
9	20/03/2019	PIVD L3 - L4 with Left sided Radiculopathy	Single Incision MIS TLIF L3 - L4 level	Assoc Professor Shu-Hua Yang
10	20/03/2019	PIVD L4 - L5 with right sided radiculopathy	Single Level MIS TLIF L4 - L5 level	Assoc Professor Shu-Hua Yang
<b>Taipei Veterans general hospital, Taipei, Taiwan</b>				
11	21/03/2019	PIVD L3 - L4 with Right Lower Limb Radiculopathy	Open TLIF L3 - L4	Prof Ming Chua Chang
12	21/03/2019	Cervical Disc disease C4 - C5	ACDF C4 - C5	Prof Ming Chua Chang
13	21/03/2019	Anterolisthesis L4 - L5 with old operated for discectomy L4 - L5	O arm navigated MIS TLIF L4 - L5 level.	Prof Ming Chua Chang
14	21/03/2019	PIVD L4 - L5 with bilateral lower limb radiculopathy	Open TLIF L4 - L5	Prof Ming Chua Chang
<b>China Medical University, Taichung, Taiwan</b>				
15	22/03/2019	Lumbar Disc Disease L4 - L5	O Arm Navigated Endoscopic Discectomy L4 - L5	Asso Prof Hsien Te Chen

16	22/03/2019	Anterolisthesis of L4 - L5 with bilateral lower limb radiculopathy	O Arm Navigated MIS TLIF L4 - L5 level	Asso Prof Hsien Te Chen
17	22/03/2019	11 months old non - union fracture D12 vertebra with implant failure	D12 Corpectomy with extension of Posterior Fixation and cement augmentation	Asso Prof Hsien Te Chen

**Taipei Medical University, Taipei, Taiwan**

18	25/03/2019	Anterolisthesis L4 - L5 with bilateral lower limb radiculopathy	TLIF L4 - L5	Prof HUANG
19	25/03/2019	PIVD L5 - S1 with right sided radiculopathy	Open TLIF L5 - S1	Prof HUANG
20	25/03/2019	PIVD L3-L4	Endoscopic Discectomy L3-L4 level	Dr. Wu Max

**Kyung Hee University Hospital, South Korea**

21	28/03/2019	PIVD L3 - L4, L4-L5	TLIF L3-L4, L4-L5	Prof Yong Chan Kim
22	29/03/2019	Lumbar Canal stenosis L4-L5, L5-S1 with bilateral lower limb radiculopathy	Posterior Decompression with fixation L4-L5-S1 with Interbody cage augmentation from anterolateral aspect	Prof Yong Chan Kim
23	29/03/2019	Old Operated case of fracture L1 vertebra with implant failure	Posterior Decompression and extension of fixation 2 levels above and below.	Prof Yong Chan Kim
24	29/03/2019	Old operated	Open TLIF L4-L5	Prof Yong Chan

		case of PIVD L3 - L4 vertebra with adjacent level degeneration L4-L5	with extension of fixation.	Kim
25	01/04/2019	Old operated case of PIVD L5 - S1 vertebra with adjacent level degeneration L4-L5	Open TLIF L4 - L5 with extension of fixation	Prof Yong Chan Kim
26	01/04/2019	Lumbar canal stenosis L2-L3-L4-L5 with bilateral radiculopathy	Posterior Decompression and Spinal Fusion at L2-L3-L4-L5 level	Prof Yong Chan Kim
27	02/04/2019	Lumbar Canal stenosis L4-L5 with bilateral lower limb radiculopathy	Posterior decompression and antero lateral fusion with cage placement and posterior instrumentation.	Prof Yong Chan Kim
28	02/04/2019	Ankylosing Spondylitis with Kyphosis deformity	Deformity correction with fixation at D6-D7-D8, D11-D12-L1 level	Prof Ki Tack Kim