Group Report for the 2015 APSS Depuy Synthes Spine Travelling Fellowship 18 May to 7 June 2015

Group 2 Fellows

1. Dr.Zaw Min Han (Myanmar)

Associate Professor, University of Medicine Mandalay Myanmar

2. Dr. Md. Shahidul Islam Akon (Bangladesh)

Assistant Professor (Spine Surgery)
Department of Orthopaedic Surgery
Dhaka Medical College Hospital
Dhaka, Bangladesh

3. Dr. Vincent Hau (Hong Kong)

Resident Specialist Pamela Youde Nethersole Eastern Hospital Hong Kong

4. Dr. G Vijayaraghavan (India)

Spine Fellow, All India Institute of Medical Science, New Delhi



From left: Dr Md. Shahidul, Dr Vincent Hau, Dr Zaw Min Han and Dr G. Vijayaraghavan (most right)

The Asia Pacific Orthopaedic Association (APOA), Asia Pacific Spine Society (APSS) travelling fellowship comprised of visiting of spine centre of excellence in three cities (Seoul, Sendai and Beijing).

First Centre - South Korea
The Catholic University of Korea
Seoul St. Mary's Hospital
Duration - 18 May 2015 to 24 May 2015
Host - Prof. Kee Yong Ha and Associate
Prof. Young Hoon Kim



Seoul St, Mary's Hospital.
The Catholic University of Korea

On 18th May, we were picked up from hotel at 6:45am and walk to St. Mary's Hospital, just across the road. In the meeting room, presentation of "Development of Spine Surgery in Mandalay, Myanmar" by Dr. Zaw Min Han and "Use of BMP-2 in Lumbar spinal fusion procedure" by Dr. Vincent Hau. Then we joined the surgeries in the operation theatre. The secretary gave some information and explanations to our group and we had to sign some agreement for clinical study. St. Mary's hospital is large, clean and well organized like smart hotel.

The operation complex was very impressive with 28 operation theatres and well equipped. Our First operation is PLIF L4-5 for degeneration case. AP Dr. Kim was the Surgeon and Group leader (Dr Zaw Min Han) got the chance to assist him. We made one new friend, Dr. Kim (fellow Kim) as

spine fellow on the first day. After the Lunch, we joined the two operations of Prof. Ha, PILF L4-5 with PLF form iliac crest for graft. He performed the exploration of spine with care of the facet joints. Second case was 71 years old male, anterior clearance of the L4-L5 lumbar for infection and insertion of autogenous iliac bone graft. Dr Akon got the chance to be the assistant.



At night, we enjoyed the welcome dinner at Barbeque House with Prof. Ha and team.

May 19th was our second day for St. Mary's Hospital, CMC. In the morning, there was a presentation made by the orthopaedic department, highlighting of papers regarding Multiple Myeloma, Bipolar Hemiarthoplasty, Steroids in RCT and discussion of spine surgery procedures. There was an active discussion between the fellows and respective professors.

Just before the lunch, we visited to CMC institute of biomedical technology and research lab. We discussed about the effect of ESWD (Extracorporeal shock wave diathermy) for spinal cord regeneration.

Then, we had lunch at the hospital restaurant room.



After lunch, two cases of operation on MIS, TLIF and percutaneous pedicle screw and rod by Sextent technique were done. This was the group leader, Dr Zaw Min Han's second time experience for this device. Then, we observed the decompression of L4-L5 level for spinal stenosis by using Microscope. At that night, we had a memorable dinner at three island restaurant in "Han" River.

On 20th May morning, there was a presentation made by Dr. Md Shahidul Islam Akon, "Results of anterior decompression through posterior approach and trans pedicular fixation of thoracolumbar spinal tuberculosis."

At the OT, we participated in two cases of DLIF for L2-3, 3-4 spinal stenosis cases. Both were very nice operations through direct lateral approach under C-arm and we learnt for careful avoidance of segmental artery injury regarding this approach. Next cases were (another) DLIF and posterior decompression and PLIF L4-5, L5-S1 level cases. We had a chance to have vegetarian buffet dinner at "Loving hut restaurant" at Seoul.



On day 4, we attended the Spine seminar in the morning. We discussed about the correction of deformity of achondroplasia case and the metastasis cases to be operated. In the afternoon, we had a chance to go for sightseeing at the Seoul Tower. Having lunch at tower with very beautiful view of Seoul from different corners was a memorable time in Seoul for all of us.



Day 5 (22 May) was the major operation day for Spine department at OR 11 and OR 13. There were 6 cases already planned. First, PLIF L3,4,5 and PLF in 77 years old male with spinal stenosis, debridement and bone graft for infection in T11 after deformity correction of 53 years old male, with achondroplasia. Third case was posterior instrumentation with sextant and anterior lumbar interbody fusion for L4-5 level post infective vertebral in osteomyelitis case. There were two cases of metastatis (carcinoma) in Thoracic and Thoracolumbar Junction. We learnt a lot for vertebral resection procedures and

posterior instrumentation with the help of microscope.

The last case was vertebroplasty case. Almost for the whole day, we enjoyed learning a lot in the operation theatre. The other rooms are performing orthopaedic surgery, such as THA, metatarsal osteotomy, impingement syndrome, shoulder and ankle operations.



During the interval for lunch, Prof. Kim presented the certificates of attendance to us at St. Mary Hospital, behalf of Prof. Ha. After that, we took group photograph.

May 23rd was Saturday and it was the last day in St. Mary's Hospital. In the morning 8:00am Prof. Ha gave a lecture entitled "What's New in Spine Surgery at Seoul St. May's Hospital in 2012-14". Then, he shared the experience of research in basic science and biomechanics. We had a fruitful discussion with Prof. Ha. After that, we went to palace and secret garden in the old city. We also experienced seeing Seoul national cemetery.



On $24^{\rm th}$ May, our group transfer to Japan, Sendai City.

Second Centre: Japan NHO Nishitaga Hospital, Sendai Duration - 24 May- 31 May 2015 Host - Prof. Shoichi Kokubun

Hospitals Visited:

- Tohoku University Hospital
- Tohoku Rosai Hospital
- Sendai Nishitaga Hospital
- Sendai Orthopaedic Hospital
- Tohoku Central Hospital (Yamagata)

On arrival to Sendai, it was 12:30pm on 24th May 2015. Prof. Kokubun waited for us at Sendai airport. He arrived back from Kobe JOA meeting an hour ahead of our group. He shared with us the condition of Sendai airport during March-11, 2011 and showed the tsunami shelters. Then, we moved to Sendai Station.

At Sendai Station, we had coffee and cakes and discussed about his philosophy of "Less invasive, less fusion, less complicated, less instrumentation, less expensive" hypothesis.

During night time, this great professor offered us the traditional Japanese dinner, Sushi, Sashimi and many other items.

On 25th May 2015, Dr. Chikashi came and brought us to Tohoku University Hospital. There was a morning conference and we met Prof. Ito. Then, we followed Prof. Ozawa to see the patients in the ward and after, we discussed about the difficult and complicated cases in the hospital.



Some of the cases discussed were of Nonunion of the VKP osteoporotic fracture, sacral chordoma, retroperitoneal tumor and others.

Later, we were brought to Tohoku Rosai Hospital to observe the operations of cervical Myelopathy (Laminoplasty), LSCS (decompression), PLIF (fusion L3-4 level) led by Prof. Sakama, Dr. Kanabuchi & Dr. Kusakabe (Chief Spine Surgery).

On 26th May, we took a taxi to Nishitaga Hospital by Route that passed by the Aoba (Sendi) Castle. Upon arriving at the doctors room, we met Dr. Morozumi, Dr. Koizumi and Dr. Chikashi. We signed the visitors' record and joined the OT with Prof. Koizumi for Laminoplasty for Cervical Myelopathy and decompression of L1-2, L2-3, L3-4, L4-5 for spinal stenosis. Dr. Koizumi is very patient in controlling the bleeding and decompression procedures. He has done step by step and followed the Prof. Kokubun's principle.



In the evening 5:00pm, we had a lecture by Prof Kokubun regarding spine surgery development at Tohoku region. He also discussed "New concept to myofacial pain, its role, examination and self treatments". Thanks to Prof. Kokubun, we got new idea of pain management. We were invited to join his OPD on Friday.



On 27th May, Wednesday, we went to Sendai Orthopaedic Hospital. Prof. Tetsuro Sato welcomed us warmly. We witnessed the step by step operation of the recurrent disk Herniation case at L4-L5 level. The procedure is decompression, pedicle screw insertion and TLIF. We learnt para-spinal approach insertion of pedicle screw from Dr. Hyodo and Dr. Nakagawa. In the evening, Dr. Sato showed us the tsunami area near his hospital, bay side and recorded video during the earthquake.

In the evening, he taught us about Ossification of yellow ligament (OYL) and

its treatment. We had a lot of discussion and enjoyed the sharing of his experience. He held a small party at night and we enjoyed with him some Japanese traditional food. Dr. Akon and Dr. Vijay were learning how to use chopsticks.



On 28th May, we had an operation day at Sendai Nishitaga Hospital. We and another international fellow of Prof Kokubun, Dr. Thein Aung Kyaw from Myanmar, learnt a lot during the operations. There were two cases of decompression at L3-4, L4-5 level for degenerative disease and we discussed about fusion rates for unstable cases found at long term follow up. Operations were done by Dr.Morozumi and Dr. Chikashi.



On 29th May, Friday, Dr Zaw Min Han and Dr. Hau, joined Prof. Kokubun's OPD. He taught K point muscles and individual muscles for diagnosis and treatments. Two other fellows; Dr. Akon and Dr. Vijay went to Yamagata Tohoku Central Hospital and met with Prof. Tanaka.

At night, dinner was held and certificates were given for the one week fellowship. All the surgeons from the different visited hospital came and joined the dinner. We enjoyed tremendously in Japan and felt that the friendship grew stronger.

May 30th was our last day in Sendai and free day. So, we went to Shiogama bay with JR and then to Matsushima by boat. We saw the different islands and enjoyed the day trip.



On the last day when we had to leave to Beijing, we took the time and prepared for APOA presentation.

Third Centre: China
301 PLA General Hospital
28 Fu Xing Road,
Beijing, 100853, China
Duration - 1st June to 3rd June 2015
Host - Prof. Wang Yan

On arrival in Beijing, China on 31st May, 10:30pm, Miss Breeze, PA of Prof. Wang Yan, picked us up from the airport and brought us to a very nice hotel Park Plaza in Beijing West.

The first day, 1st June 2015, we arrived to 301 PLAGH. The high building of the OPD surprised our fellowship team. There were 10 spine surgeons, 15-20 cases of operation everyday and 10 OT rooms for spine and extremity surgery. Associate Professor Zheng Guoquan explained about the 3 days program and took us to Prof. Yan Wang's office. Professor is very polite, kind and smart person. He explained about the hospital, which has medical and surgical branches and 4000 in patients and 20,000. OPD patients everyday. There are 2 spine surgery units and 6 orthopaedic and trauma units. He also introduced his new book on "Spinal Osteotomies".

We visited the OT complex and saw all the rooms, which were clean and wide. Most of the rooms were fully equipped. According to data, there are 16 OT cases on this Monday.



We managed to observe the following cases

1. 57 years old female; a case of Ankylosing Spondylitis. Thoracic to Lumbar for VCD (Vertebral Column Decancellation) osteotomy and correction with pedicle screws and rods. We also learnt the degree for corrective regarding SS, PT and PI.



- 2. 15 years old female; a case of thoracic scoliosis for correction with pedicle screws and rods.
- 3. 60 years old female; a case of osteoporotic compressed fracture of T12 and L1 for vertebroplasty and posterior instrumentation.
- 4. 42 years old female; Spondylolisthesis L5 on S1. Meyerding's Grade III for reduction and PLIF. We learnt about the reduction by lever arm method though the L5-S1 disk space.
- 5. 47 years old male; OYL at T9-10 and T10-11 level for decompression.
- 6. 72 years old male; PID L4-L5 level for percutaneous dissectomy under

- LA though lat: approach and using Endoscope (PLD).
- 7. 67 years male; PID L3-4 level for (PLD).
- 8. 52 years old male; a case of tuberculosis C3-4 level with abscess formation and spinal cord compression. Operated by decompression and ACCF with plate and screws.



9. 31 years old male; PID L4-5 region with nerve root compression for PLD.

At that night, we had the famous Beijing duck for dinner at hospital restaurant.

During the second day in the morning, there was a spine meeting at the general meeting room. Presentation about 301 peoples Liberation Army General Hospital (PLAGH), there were Prof. Wang's presentation about VCD followed by presentation of Prof. Jeffery FISCHGRUND from William Beaument Hospital, Royal Oak, Michigan United States.



We also had the honoured to present our respective presentations. After, we had active discussions about deformity surgery and learnt about set up designs used at different spine centres.

In the afternoon, we visited Tiananmen Square and enjoyedd 3 hours of walking and learning about the history at the Forbidden City and Old Royal Palace.

June 3rd, Wednesday was our last day in Beijing and we had to leave to Hong Kong in the evening. Before we left, we visited and enjoyed climbing the Great Wall.



Attending the APSS and APPOS Combined Congress in Hong Kong

Venue: Hong Kong Convention and Exhibition Centre

Hong Kong is beautiful place and we were invited to attend the conference at the Hong Kong Convention and Exhibition Centre, where we can see beautiful bay.

In the conferences, we attended all spine sections and learnt a great deal from the experts around the region and worldwide.

Day 1, 4th June, 2015

SRS WWC degenerative Scoliosis. Adolescent Idiopathre Scolisis.

Day 2, 5th June, 2015, Friday

APSS Fellowship Experience Presentation (Represented by our Group Leader, Dr Zaw Min Han)

SRS WWC Post infection Spinal deformities APSS Cervical degeneration Symposium APSS Spinal infection Symposium APSS Spinal tumors

Day 3, 6th June, 2015, Saturday

APSS Lumbar degeneration Symposium Opening Ceremony Visiting Professor Lectures AO Spine Advance Symposium Spinal fracture



At night, there was a banquet dinner at the Run Run Shaw Hall, Hong Kong Academy of Medicine and we received the certificates of Travelling Fellowship 2015.

Day 4, 7th June, 2015, Sunday

We attended the free paper presentation, APSS operative video sessions and APSS case discussion with global panel.

In the evening, all the fellowship members went back to their own countries.

We would like to say thanks to Asia Pacific Spine Society for giving us that great opportunity. The fellowship committee chose the right centers for the fellows, coordinated the program and making plans for the convenience of individuals. We realized it is difficult job and tiring effort. We would like to thanks Prof. Arvind Javaswal (President). Dr. Kunivoshi Abumi (Vice President and President Elect) and Dr. Mun-Keong Kwan (Honorary Secretary) for giving us the chance and helping us throughout the fellowship program in various countries. We have to say special thanks to Jenny Wong for managing the all trip plan and she was always keeping in touch throughout the fellowship.



Our team; Dr Zaw Min Han, Dr. Akon, Dr. Vijay and Dr. Vincent had consistent active planning, discussions and co-operation throughout the fellowship. We will remember each other and special thanks to APSS Committee for this active and lively fellowship program.

Attached Below is our log book.

Logbook Entries:

No.	Date	Age	Sex	Diagnosis	Procedure	Surgeon	Hospital
1	18-5-2015	66	F	Spinal Stenosis L4-L5	PLIF L4-5	Prof. Kim	Seoul St, Mary's Hospital
					PLF		
2	18-5-2015	71	M	Pyogenic Spondylitis L4-L5	PIF L4-5	Prof. Ha	Seoul St, Mary's Hospital
					AC Bone graft		
3	19-5-2015	79	F	Degenerative Stenosis	MIS – TLIF ്(Sextant)	Prof. Kim	Seoul St, Mary's Hospital
4	19-5-2015	49	M	Spinal Stenosis L2-3, L3-4, L4-5	Decompression L4-L5	Prof. Kim	Seoul St, Mary's Hospital
5	20-5-2015	62	M	Degenerative Scoliosis	DLIF L2-3, L3-4 (1st stage procedure)	Prof. Ha	Seoul St, Mary's Hospital
6	20-5-2015	75	F	Degenerative scoliosis post traumatic Kyphosis	DLIF L2-3 L3-4	Prof. Ha	Seoul St, Mary's Hospital
7	20-5-2015	72	F	Spondylolisthesis L4-L5 Spinal Stenosis L1 – S1	DLIF L2-3 L3-4 post decompression	Prof. Kim	Seoul St, Mary's Hospital
8	22-5-2015	77	M	Spinal stenosis L3- L5	PLIF L3-4-5	Prof. Ha	Seoul St, Mary's Hospital
				(Degenerative Scoliosis)	PLF & PI 345		
9	22-5-2015	53	F	Operated Case of Achochoplasia	Bone graft	Prof. Ha	Seoul St, Mary's Hospital
					(Auto + Allo)		
10	22-5-2015	75	M	Pyogenic Spondylitis L4-5	PI and AIF (Anterior	Prof. Kim	Seoul St, Mary's Hospital
					Lumbar interbody		
					fusion)		
11	22-5-2015	76	F	Metastatic Carcinoma D3-6 Cord	Laminectomy D5 and	Prof. Kim	Seoul St, Mary's Hospital
				compression D5 (Metastasis)	PI		
12	22-5-2015	70	M	Pathological compressed	Microscopy assisted	Prof. Kim	Seoul St, Mary's Hospital
				fracture T2-L2 carcinoma of	D2 corpectomy and PI		
				Long	D1-3		
13	25-5-2015	85	F	Spinal Stenosis L3-4-5	Decompression L3-4,	Prof. Kusakabe	Tohoku Rosai Hospital
					L4-5		
14	25-5-2015	77	F	Spinal Stenosis with Instability	PLIF and PLF	Prof. Kusakabe	Tohoku Rosai Hospital
15	26-5-2015	62	M	Cervical Myelopathy	Laminoplasty	Prof. Koizumi	Sendai Nishitaga Hospital
16	26-5-2015	62	F	Lumbar Spinal canal Stenosis	Decompression L1-2,	Prof. Koizumi	Sendai Nishitaga Hospital
				(LSCS)	L2-3, L3-4, L4-5		

17	27-5-2015	66	F	Recurrent disk Herniation L4-L5	Decompression TLIF	Dr. Hyodo	Sendai Orthopaedic
				level		Dr. Sato	Hospital
18	28-5-2015	71	M	Degenerative Spinal Stenosis	Decompression L3-4	Dr. Nlorozumi	Sendai Orthopaedic
					L4-L5	Dr. Chikashi	Hospital
19	1-6-2015	57	F	A.S (Thoracic to Lumbar)	VCD and Deformity	Prof. Wang Yan	301 PLA General Hospital
					Correction, PI		
20	1-6-2015	16	F	Thoracic scoliosis (AIS)	Deformity Correction	Surgical team	301 PLA General Hospital
21	1-6-2015	60	F	Osteoporotic compressed # T12	PI and Vertebroplasty	Surgical team	301 PLA General Hospital
				- L1			
22	1-6-2015	42	F	Spondylolisthesis L5-S1 G III	Reduction PLIF	Surgical team	301 PLA General Hospital
23	1-6-2015	47	M	OYL T9-10, T10-11	Decompression	Surgical team	301 PLA General Hospital
24	1-6-2015	72	M	PID L4-L5	PID (Percutaneous)	Surgical team	301 PLA General Hospital
25	1-6-2015	67	M	PID L3-4 level	PID	Surgical team	301 PLA General Hospital
26	1-6-2015	52	M	Pott's Spine C3-4	ACCF with plate &	Surgical team	301 PLA General Hospital
					screw		
27	1-6-2015	31	M	PID L4-5 with nerve root	PID	Surgical team	301 PLA General Hospital
				compression			